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, DR 1197 July 1981

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METEOROLOGICAL DATA REPORT

19315B MLRS
Missile Number V28-002
Round Number V-172/AT-3
20 July 1981

by

DTICTE SEP 2 1981

DONALD C. KELLER Program Support Coordinator Phone Number (505) 679-9568 AVN Number 349-9568

ATMOSPHERIC SCIENCES LABORATORY WHITE SANDS MISSILE RANGE, NEW MEXICO

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| 20. ABSTRACT (Continue on reverse side if necessary and identify by block number)   | ··  |
| Meteorological data gathered for the launching  |   |
| number V28-002, Round Number V-172/AT-3 presented in  | tabular form.   |
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### INTRODUCTION

19315B MLRS, Missile Number V28-002, Round Number V-172/AT-3, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1043 MDT, 20 July 1981. The scheduled launch time was 0730 MDT.

### DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

### 1. Observations:

- a. Surface
- (1) Standard surface observations to include pressure, temperature (°C), relative humidity, dew point (°C), density  $(gm/m^3)$ , wind speed and direction, and cloud cover were made at the LC-33 Met Site at T-0 minutes.
- (2) Anemometer data were provided from existing pole-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.
  - b. Upper Air:
- (1) Low level wind data were obtained from Pilot-Balloon observations at:

### SITE AND ALTITUDE

LC-33 2 KM NICK 2 KM

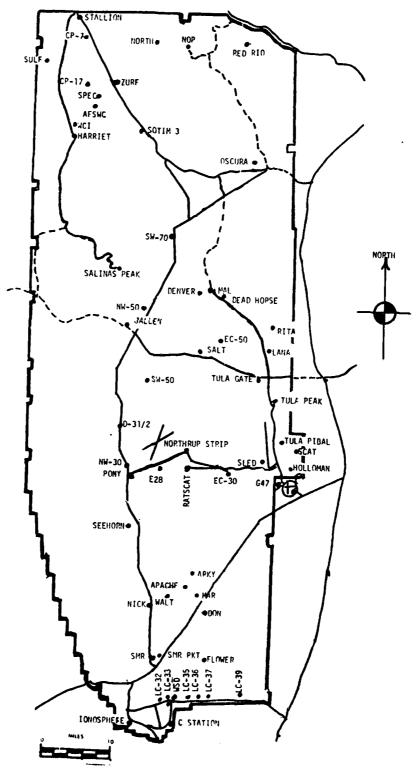
(2) Air structure data (rawinsonde) were collected at the following Met Sites:

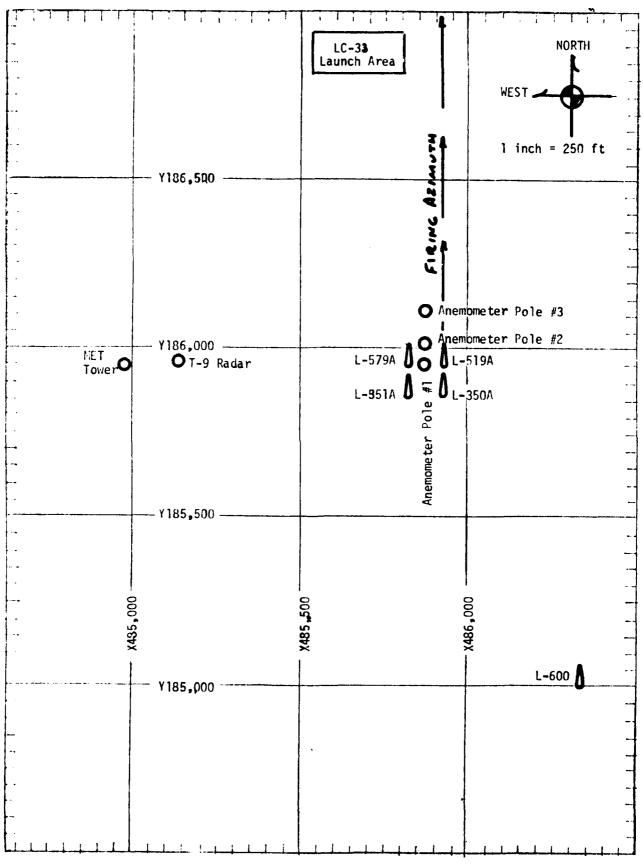
### SITE AND TIME

WSD 0630 MDT LC-37 0730 MDT WSD 0830 MDT LC-37 0930 MDT WSD 1030 MDT

| Accession For      |
|--------------------|
| NTIS GRAWI         |
| DEIC T'S           |
| Unannounced [      |
| Justification      |
|                    |
| Ву                 |
| Distribution/      |
| Availability Codes |
| Aveil and/or       |
| Dist Special       |
| A                  |

## WSMR METEOROLOGICAL SITES





PPOJECT SURFACE OBSERVATION

| DATE         20         WINTH         1981           DATE         DATE         MAIND         MIND           TIME         PRESSURE         TEMPERATURE         DEW POINT         HUMIDITY         DEMSITY         DIRECTION         SPEED         CHARACTER         VISIBIL           M D.         Mbs         OF         OC         NO         MIND         Adegs In         kts         kts         ITY           1043         882.7         31.7         12.5         31.7         997         358         05         50+ | TABLE 1        |       |       |             |          |      |                      | S                | STATION LC-33        | 33                   |                  |                 |
|---|----------------|-------|-------|-------------|----------|------|----------------------|------------------|----------------------|----------------------|------------------|-----------------|
| PRESSURE TEMPERATURE DEW POINT HUMIDITY DEMSITY mbs of of 31.7 12.5 31. 997   | DATE 20        |       | 1981  | _1          |          |      |                      | <i>7</i> 65      | = 484,982,64         | T=,                  | 85,957,73 H      | - 3983.0        |
| 882.7 31.7 12.5 31 997 358  | 11 PE<br>M D T |       | TEIPE | ATURE<br>OC | OFW<br>P | OINT | PELATIVE<br>HUMIDITY | DENSIIY<br>gm/m3 | DIRECTION<br>degs In | MIND<br>SPEED<br>kts | CHARACTER<br>kts | VISIBIL-<br>ITY |
|   | 1043           | 882.7 |       | 31.7        |          | 12.5 | 31.                  | 766              | 358                  | 90                   |                  | <del>2</del> 0+ |
|   |                |       |       |             |          |      |                      |                  |                      |                      |                  |                 |
|   |                |       |       |             |          |      |                      |                  |                      |                      |                  |                 |

| REMARKS                       |                                   |          |       |  |  |
|-------------------------------|-----------------------------------|----------|-------|--|--|
|                               |                                   |          |       |  |  |
|                               |                                   | 167      |       |  |  |
|                               | LAYER                             | TYPE   } |       |  |  |
| 3rd LAYER                     | AMT                               |          |       |  |  |
|                               | CLOUDS<br>1st LAYER ( 2nd LAYER ( |          | 25000 |  |  |
| CI OIDS                       |                                   | TYPE     | 13    |  |  |
|                               |                                   | AMT      | 2 CI  |  |  |
|                               |                                   | 1 HGT    | 6500  |  |  |
|                               |                                   | TYPE     | ਰ     |  |  |
|                               | lst                               |          | _     |  |  |
| OBSTRUCTIONS<br>TO VISIBILITY |                                   | NONE     |       |  |  |

PSYCHROPETRIC COMPUTATION

| ŀ               | _    |  |
|-----------------|------|--|
| TINE: MDT       | 1043 |  |
| DRY BULB TEI'P. | 31.7 |  |
| WET BULB TEMP.  | 18.9 |  |
| WET BULB DEPR.  | 12.8 |  |
| DEW POINT       | 12.5 |  |
| RELATIVE HUMID. | 31%  |  |

TABLE 2 LC-33 FIXED POLE ANEMOMETER MEROSPED WINDS 1043 MDT 20 July 1981

| POLE #1<br>x485,874<br>Y185,958<br>H4018.74<br>38.7 ft | 8.90<br>4  |              | POLE #2<br>X485,874<br>Y186,012<br>H4033.57<br>53.0 ft. | 1,93<br>2,00 |      | POLE<br>7485,8<br>1186,1<br>44063.<br>83.6 f | 77. )<br>16.06<br>92 |       |
|--|------------|--------------|---|--------------|------|--|----------------------|-------|
| T-TIME<br>SEC  | DIR<br>DEG | SPEED<br>KTS | T-TIME<br>SEC   | DI R<br>DE G |      | T-TIME<br>SEC                                | DIR<br>DEG           | SPEED |
| T-30   | 013        | 04           | T - 30  | 357          | 03   | T = 3·)                                      | 015                  | 04    |
| T <sub>-20</sub>                                       | 013        | 04           | T <sub>-20</sub>  | 356          | , 02 | T -21  | 020                  | 04    |
| T-10   | 006        | 04           | T-10  | 355          | 03   | T <sub>-10</sub>                             | 020                  | 04    |
| T0.0   | 011        | 03           | <b>T</b> 0.0  | 354          | 03   | T0.2   | 015                  | 04    |
| 'T+10  | 003        | 04           | T+10  | 342          | 03   | T <sub>+1)</sub>                             | 359                  | 04    |

TABLE 3 LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WINDS (202 FT TOWER)

| LEVEL #1, 1:<br>X484,982.64 |         | 73, H3983.00 (base) | LEVEL #2, 62<br>X484.982.64 |         | 3, H3983.00 (base) |
|-----------------------------|---------|---------------------|-----------------------------|---------|--------------------|
| T-TIME SEC                  | DIR DEG | SPEED KTS           | T-TIME SEC                  | DIR DEG | SPEED KTS          |
| T-30                        | 358     | 04                  | T-30                        | 003     | 05                 |
| <b>T</b> - $\alpha$ 0       | 348     | 03                  | T-20                        | 351     | 05                 |
| <b>T-1</b> 0                | 360     | 04                  | T-10                        | 348     | 05                 |
| 70.0T                       | 348     | 04                  | To.0                        | 349     | 05                 |
| <u>T+10</u>                 | 348     | 04                  | T+1()                       | 354     | 05                 |

| LEVEL #3, 10<br>X484,982.64 | 02 FEET<br>, Y185,057.7 | 3, H3993.00 (base) | LEVEL #4, 20<br>X484,982, Y1 |         | 3983.00 (base) |
|-----------------------------|-------------------------|--------------------|------------------------------|---------|----------------|
| T-TIME SEC                  | DIR DEG                 | SPEED KTS          | T-TIME SEC                   | DIR DEG | SPEED KTS      |
| <b>T-</b> 30                | 003                     | 05                 | T <sub>-30</sub>             | 018     | 05             |
| <b>F</b> 20                 | 003                     | 06                 | T-20                         | 021     | 04             |
| <b>F</b> 10                 | 003                     | 05                 | T <sub>-10</sub>             | 033     | 04             |
| 10.0                        | 013                     | 05                 | T <sub>0.0</sub>             | 033     | 04             |
| <b>†</b> 10                 | 012                     | 05                 | <b>T+1</b> 0                 | 026     | 04             |

### THIME PILOT-DALLOOM MEASURED WIND ONTA

DATE 20 July 1981

SITE: LC-33

TIME: 1043 MDT

WSIN COOPDINATES:

 $\chi = 485,135.76$ 

<sup>γ=</sup> 185,919.24 H= 3,988.57

SITE: NICK

TIME: 1043 MDT

WSTM COOPDINATES:

 $\chi = 470,734.56$ 

Y = 255,775.64

H = 4,126.57

| LAYER MIDEDINT METERS AGE | DIRECTION DEGREES | SPEED<br>KNOTS | LAYER MIDROINT METERS AGL | DIPECTION DEGPEES | SPEED<br>KNOTS |
|---------------------------|-------------------|----------------|---------------------------|-------------------|----------------|
| SUPPACE                   | 349               | 03             | SURFACE                   | 010               | 02             |
| 150                       | 090               | 05             | 150                       | 358               | 04             |
| 210                       | 050               | 04             | 210                       | 353               | 04             |
| 270                       | 044               | 07             | 270                       | 347               | 04             |
| 33.)                      | 031               | 06             | 330                       | 340               | 04             |
| 390                       | 028               | 07             | 300                       | 343               | 04             |
| 500                       | 012               | 06             | 500                       | 002               | 03             |
| 650                       | 325               | 01             | 650                       | 019               | 04             |
| <b>30</b> 0               | 180               | 01             | 800                       | 187               | 02             |
| 750                       | 105               | 03             | 950                       | 189               | 07             |
| 1150                      | 096               | 02             | 1150                      | 175               | 05             |
| 1350                      | 083               | 02             | 1350                      | 170               | 04             |
| 1550                      | 061               | 03             | 1550                      | 219               | 01             |
| 1750                      | 043               | 03             | 1750                      | 298               | 02             |
| 2000                      | 058               | 03             | 2000                      | 022               | 03             |
|                           |                   |                |                           |                   |                |

Data obtained from RAPTS T-9 radar Tracked Pilot-Balloon Observation.

Data obtained from Single Theodolite Tracked Pilot-Balloon Observation.

# AIMING AND T-TIME COMPUTER MET MESSAGES 20 July 1981

| WSD 0630 MDT                       | LC-37 0730 MDT           | WSD 0830 MbT          |
|------------------------------------|--------------------------|-----------------------|
| METCM1324064                       | METCM1324063             | METCM1324064          |
| 201250122881                       | 201350124879             | 201450122 <b>8</b> 82 |
| 00391004 29530881                  | <b>00249004</b> 29820879 | 00249003 30170882     |
| 01407004 30130871                  | 01232005 30020869        | 01250005 30120872     |
| 02343003 30340846                  | 02206005 30180845        | 02250097 30050848     |
| 03425004 30060809                  | 03293003 29970807        | 03271004 29980810     |
| 04418004 29690764                  | 04564002 29650762        | 04260002 29680765     |
| 05344002 29210721                  | 05624001 29200719        | 05006001 29250722     |
| 06131002 28770680                  | 06633004 28770678        | 06019003 28840681     |
| 07068011 28 <b>3</b> 80 <b>641</b> | 07073012 28350639        | 07066012 28390641     |
| 08056018 279606 <b>0</b> 3         | 08081015 27900601        | 08093017 27940604     |
| 0 <b>908</b> 3013 <b>27470567</b>  | 09093012 27430566        | 09107016 27500568     |
| 10093016 26990533                  | 10087012 27010531        | 10138016 27060533     |
| 11078012 26550500                  | 11113011 26610499        | 11166011 26720501     |
| 12132010 26140454                  | 12104008 26140452        | 12126010 26380455     |

| 930 MDT  | WSD 1030 MDT   |
|----------|--|
| 063      | METCM1324064   |
| 380      | 201650122883   |
| 30410880 | 00622006 30560883  |
| 30320870 | 01626001 30470873  |
| 30080846 | 02024005 30250848  |
| 29910808 | 03191002 30000811  |
| 29570763 | 04133003 29650766  |
| 29140720 | 05100003 29190723  |
| 28710679 | 06065004 28760681  |
| 28260640 | 07094011 28350642  |
| 27830602 | 08108014 27910604  |
| 27420566 | 09143015 27470568  |
| 27010532 | 10167009 27070534  |
| 26680499 | 11146006 26790501  |
| 26300453 | 12090009 26360455  |
|          | 3063<br>30410880<br>30320870<br>30080846<br>29910808<br>29570763<br>29140720<br>28710679<br>28260640<br>27830602<br>27420566<br>27010532 |

SIGLIFICANT LEVEL DATA PRIODERROS WHITE SANDS

GEOURTIC COORDINATES 32.40043 LAT DEG 106.37033 LOD BEG

|                  |         | Kt L. HUN.           | PERCENT                | 0.00     | 52.0   | 0.44   | 41.0   | 43.0   | 0.05    | 0.4.    | 0.66    | 96.0    | 53.0    | 47.0    | 0.04    | 0.07    | • |
|------------------|---------|----------------------|------------------------|----------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---|
| WHITE SANDS      |         | <b>LEMPERATURE</b>   | DEWPOINT<br>CENTIGRADE | 1. S. C. | 14.7   | 15.8   | 13.9   | T. ~   | 4.7     | ٥       | £.≎.    | 2001    | -17.3   | -23.5   | 3.1     | -24.1   |   |
| ***              | TABLE 6 | IENPE                | AIR<br>DFGREES         | 20.2     | 25.3   | 28.6   | 28.4   | 22.0   | 15.0    | 8.1     | -8.7    | -9.3    | -9.5    | -14.5   | 6.41-   | -17.2   | • |
| 1                |         | PICESSURE OF UMETICE | ALTITULE<br>MSL FELT   | 3989.0   | 4184.9 | 4505.9 | 5017.3 | 8182.0 | 10568.8 | 13564.2 | 19562.5 | 19968.7 | 20666.1 | 23140.4 | 23993.3 | 25167.6 | • |
| 1 0 SHI 183 10 1 |         | PICESSURE            | MILLIBARS              | 3.080    | 674.6  | 0.65.0 | 850.0  | 761.8  | 700.0   | 657.8   |         |         | 4,78.8  | 434.0   | 419.4   | 400.0   |   |
| ંજ               |         |                      |                        |          |        |        |        |        |         |         |         |         |         |         |         |         |   |

| GFODETIC COORDITABLES<br>32.40043 LAT DEG<br>106.37033 LOU DEG | THUF X<br>OF<br>REFRACTION                   | KEFKAC 1100.     | 7 310011 | 1.000245                        | 1.000284     | 1.000278 | 1.000272 | 1.000021 | 1.000202                              | 1.000251 | 1.000246 | 1.000241 | 1.000256    | 1.000232 | 1.000227 | 1.0002;3 | 1.000218 | 1.000214     | 1.000209  | 1.000205 | 1.05000.1 | 301000-1 | 1.000192     | 1.000109 | 1.000186 | 1.000163 | 1.000179 | 0/1/000                                 | 1.000 L     | 1 0:01.7   | 1 - 0.00 16.0  |  | 1,000152 | 1.000147                                 | 1.000144 | 1.000142 | 1.000139         | 1.000136 |
|--|--|------------------|----------|---------------------------------|--------------|----------|----------|----------|---------------------------------------|----------|----------|----------|-------------|----------|----------|----------|----------|--------------|-----------|----------|-----------|----------|--------------|----------|----------|----------|----------|---|-------------|------------|----------------|--|----------|--|----------|----------|------------------|----------|
| 55.00E.TI  | SPEED<br>KHOTS                               | K1015            | •        | <br>                            | 3.6          | 3.4      | က်<br>က် | V 1      | œ.                                    | 4.2      | 3.3      | 2.6      | 7.7         | 1.8      | 1.9      | 1.3      | ٥٠٧      | ر<br>م<br>ا  | 6.7       | 10.1     | 12.9      | 13.4     | 13.5         | 17.9     | 17.0     | 17.7     | 17.2     | 0.                                      | 0.0         | * :        |                | 0.01                                   | 11.0     | 7.6                                      | 9.0      | 9•3      | 4.6              | 10.0     |
|  | IND DATA<br>UIRE, TION S<br>DEGREES (TN) K   | DEGREES 1147     | 0.073    | 217.1                           | 215.1        | 212.2    | 2,555    | 239.6    | 7.027                                 | 540.42   | 230.5    | 218.5    | 2002        | 170.5    | 149.0    | 106.0    | 5.73     | ĵ•.<br>□ :   | ς.<br>.γ. | 45.5     | 38.0      | 3.17     | 0.10         | 37.5     | 43.0     | 4.64     | 7.20     | · • • • • • • • • • • • • • • • • • • • | 2.          | 7.10       | *              | (4)                                    | 7        | 3.00                                     | 1.00     | 07.1     | 6.50             | 30.1     |
| UATA<br>105<br>105   | SPEFT OF<br>SCUND<br>NACLS                   | Nisci S<br>MGG 4 |          | 5574°A                          | 676.9        | 671.1    | 670.5    | 675.3    | 570.0                                 | 671.6    | 670.1    | 60,003   | thu.        | 664.8    | 665.1    | 40194    | 660.2    | 656.9        | 657.5     | 0.50     | 1.450     | 1.000    | **TC0        | 1940     | 640.4    | 2.44.9   | _        |   |             |            |                | 034.1                                  | 6,550    | 530.1                                    |          |          | b2d•4            | 627.1    |
| PPT R A1 UM<br>2-1002PH453<br>WHITE SAIDS                      | DE ISITY<br>GM/CHFIL<br>MFTER                | 76 1F.K          | 1. FOUT  | 7.70U                           | 975.6        | 2.296    | 944.1    | 950.0    | 96.34.0                               | 89.00    | 887.0    | 87,20    | 865.1       | 854.4    | 845.6    | 832.3    | A20.8    | 4.408        | 790.2     | 787.1    | 770.3     | 700.5    | 744.7        | 734.5    | 724.3    | 71.4.4   | 704.h    | 695.0                                   | 680.6       | 6/4.3      | 65/40          | 7.00                                   | 6 41. 7  | 627.2                                    | 615.3    | 605.0    | 590.1            | 58,,,7   |
| _  | REL_FUM.<br>PERCETIT                         | <u>.</u>         | 0 0      | 59.0<br>46.1                    | 41.2         | 41.3     | 41.6     | ) H      | 200                                   | 42.9     | 43.9     | 45.4     | 46.9        | 48.3     | 49.8     | 50.6     | 51.2     | 51.9         | 52.6      | 53.2     | 53.9      | 0.0      | 64.8<br>84.8 | 68.5     | 72.3     | 76.0     | 79.8     | 30°5                                    | 5°.50       | 0.16       |                | 999                                    | 63.0     | 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2 | 51.0     | 49.8     |                  | 47.3     |
|  | TEMPERATURE<br>R. DEWPOINT<br>LES CLUTICRADE | LITTERADE        | 2.21     | 12.5                            | 13.9         | 13.1     | 12.5     | 11.5     | 7 • OT                                | 0.1      | 100      | 7.5      | <b>0•</b> 0 | 5.7      | 8•†      | 5.0      | 3•0      | 5 <b>.</b> 5 | 1•3       | <b>.</b> | ۍ .<br>ا  |          | - 7          | 10°      | -3-1     | 8.5      | J. 1. 5  | 5 • S.                                  | <b>-6.1</b> | )<br> <br> | ກ • ′<br>• ′ ′ | \• :: \• : \• : \• : \• : \• : \• : \• |          | 7.7.                                     | -12.3    | ₹        | -21.1            | 6-77-    |
| 33393.0 FEET ESL<br>0636 лиз м.DT<br>.3                        | IEMPE<br>AIE.<br>DEGRLES C                   |                  | 7.07     | 000<br>000<br>000<br>000<br>000 | <b>†•</b> ₽¢ | 77.4     | 5.00     | 3        | * * * * * * * * * * * * * * * * * * * | 25.4     | 21.1     | 19.6     | 18.1        | 16.7     | 15.2     | 14.0     | 12.9     | 11.7         | 9•01      | ±•€      | ດ.<br>ສ   | 0 1      | n - 1        | 2.7      | 1.3      | -:1      | -1.5     | ٠٠\<br>ا                                |             | , .        | 1:7            | 0 0                                    |          | 0.01                                     | -11-2    | -12.2    | -13.2            | -14.5    |
| TUDE.  | PRESSORE                                     | HLLIBARS         | 0.000    | 80000                           | 850.5        | 835.9    | R21.6    | 30 / • 5 | 7.00.0                                | 7,00.6   | 755.3    | 740.0    | 727.0       | 714.3    | 701.7    | 639.1    | 670.7    | 604.5        | 652.6     | 9•0±9    | 629.3     | 6010     | 544          | 583.3    | 572.4    | 501.6    | 5-1-1    | - O#C                                   | 5,000       | 550.P      | 510.6          | 2.100                                  | 491.0    | 477.5                                    | 465.2    | 454.1    | 443.2            | 430.4    |
| STATICH ALITUDE<br>20 JULY 81<br>ASCENSION NO. 40              | OFO.4 TRIC<br>ALITHOE<br>ASL FEET I          | _                | 1.00.000 | 4000.0                          | 2000         | 5500.0   | ŭ•û0u∩   | 0.0000   | 0.007                                 | 0.0000   | 0.0000   | Julia.   | 0.0000      | 10000-9  | 10500.0  | 11000.0  | 11500.0  | 12000.0      | 12590.0   | 15000.0  | 1.55.00.0 | 14000-0  | 1.4500.0     | 15500.0  | Londo.c  | 10500-0  | 17000-0  | 17500-0                                 | 13000.9     | 13504.0    | 19009-5        | 0.0000                                 | 0.0000   | 0.0001                                   | 0.00512  | Z-000-7  | <b>0•UU¹,</b> >> | 4.3000 A |

| 0.FOULTIC COMMITMATES                             | 106•37033   004 DEG | Inut x<br>of  | NEFRACTION 1+000133 1+000120 1+000128     |
|---|---------------------|---|---|
| 6.FOUL T1   | 100                 | 1A<br>SPEEU<br>KROTE  | 5.6<br>7.6                                |
|   |                     | LINC DATA LINE LING SELECTION LINE CARE SELECTION   | 30°B                                      |
| 1 1 A<br>0.3<br>U.S                               | <u>.</u> '. ⊓       | SPEEU OF SOUND ALOTS  | 57r.1 62p.6<br>565.2 026.3<br>55r.0 625.1 |
| UFP, R. A.D. Enta<br>2n10020403<br>AHITE SAIDS    | TABLE 7 CON'T       | DE,SITY<br>GM/CUG1,<br>MFTER  | 57n.1<br>565.2<br>55n.0<br>547.0          |
|   | •                   | KEL, HIJM.<br>PERCENT   | 44.0<br>40.1<br>44.3<br>48.6              |
| ETSL<br>DT  | į                   | FRESSORE TERPERATURE RELIBING DESSITY SPEED OF MILLEDARS DECRES CENTICRADE METER METER NAMES OF | -24.2<br>-25.4<br>-25.2<br>-25.2          |
| L 3yAgonu FEET SL<br>OS SA HRS HDT<br>463         |                     | $\Box$  | -14.7<br>-14.9<br>-15.9                   |
| <u> </u>  | 07.00               | rktssukt<br>HILLIUARS   | 427.8<br>419.3<br>410.9<br>402.7          |
| STATION ALITTUDE<br>O JULY 8.1<br>ASCLISION NO. 4 | of O.s. TD1.        | ALTITUDE FRESCORE   | 2.35,00 • 0<br>2.45,00 • 0<br>6.45,00 • 0 |

| ₹           |                          | 3.6   | 5.4  | 3.1  | 1.8  | 6.2  | 18.2  | 17.0  | 13.3  | 5.5   |   |  |
|-------------|--------------------------|---|--|--|--|--|---|---|---|---|---|--|
| J ONI M     | DIRECTION<br>DEGREES(TN) | 215.1   | 243.1  | 227.2  | 145.7  | 40.3   | 30.05   | 52.5  | 29.1  | 66.B  | i   |  |
| KEL.HU.     | PERCENT                  | 41.   | 42.  | * † †  | .04  | 53.  | 63.   | я0•   | -66   | •64   | 50•   |  |
| ERATURE     | DE CPOINT<br>CENTIGRADE  | 13.9  | 11.1   | 8.1  | 7. 4   | 1.1  | -1.7  | -4.5  | H-8-  | -21.1   | -25•1   |  |
| •           | AIK<br>DEGREES (         | 28.4  | 24.9   | 20.7   | 15.0   | 10.3   | Q• 7  | -1.7  | -8.7  | -12.7   | -17.2   |  |
| EUPOTENTIAL | FEE.T                    | 5014.   | 6772.  | 8019.  | 10558.   | 1c602.   | 14770.  | 17074.  | 19535.  | 22199.  | 25125.  |  |
| PRESSURE G  | MILLIHARS                | N56.p   | น•00ส  | 750.0  | 100.00   | 650.0  | U•009   | 550.0   | 200°D   | 0.054   | 0.00 p  |  |
|             | RERATURE RELAMINA        | GEUPOTENTIAL TEM.ERATURE KEL-HUD.<br>AIR DEAPOINT PERCENT DIME<br>FERT DEGREES CENTIGRADE | GEUPOTEITIAL TEM.ERATURE KEL.MI WIND DAIR AIR DEAPOINT PERCENT DIRECTION FERT DEGREES CENTIGRADE DEGREES(TM) 5014. 28.4 13.9 41. 215.1 | GEUPOTEITIAL TEM.ERATURE REL.MI WIND DAIR AIR DEAPOINT PERCENT DIRECTION FELT DEGREES CENTIGRADE UEGREES(TR) 5014. 28.4 13.9 41. 215.1 3 | GEUPOTEITIAL TEM.ERATURE REL.MIL. WIND DAIR FELT DIRECTION FERT DEGREES CENTIGRADE USCREES(TR) 5014. 28.4 13.9 41. 215.1 3 4 6772. 24.9 11.1 44. 227.2 3 | GEUPOTEITIAL TEM.ERATURE REL.HIL. WIND DAIR LEET DEGREES CENTIGRADE UEKCENT DIRECTION FERCENT DIRECTION 5014. 215.1 3 4 4 5 50. 145.7 1 1 10558. | GEOPOTEITIAL         TEM.ERATURE         REL.HIL.         WIND DAIL           FE.T         DEGREES CENTIGRALY         DEGREES (TN)           5014         28.4         13.9         41.         215.1         3           6772         24.9         11.1         42.         243.1         4           8619         20.7         8.1         44.         227.2         3           10558         15.0         4.7         50.         145.7         1           12602         10.3         1.1         53.         40.3         7 | GEOPOTEITIAL         TEM.ERATURE         REL.HIL.         WIND DAIL           FE.T         DEGREES CENTIGRALY         DEGREES (TN)           5014.         28.4         13.9         41.         215.1         3           6772.         24.9         11.1         42.         243.1         4           8619.         20.7         8.1         44.         227.2         3           10558.         15.0         4.7         50.         145.7         1           14770.         4.8         -1.7         63.         30.0         18 | GEUPOTEITIAL         TEMERATURE         REL.HII         WIND DAI           FELT         DEGREES CENTIGRADE         DISCREES(TRI)           5014.         28.4         13.9         41.         215.1           6772.         24.9         11.1         42.         243.1         4           1058.         15.0         40.7         243.1         4         227.2         3           1058.         15.0         40.7         50.         145.7         145.7         145.7         145.7         145.7         145.7         145.7         145.7         145.7         145.7         145.7         145.1         145.7         145.1         145.7         145.1         145.7         145.1         145.7         145.1         145.7         145.1         145.7         145.1         145. | GEUPOTEUTIAL         TEMERATURE         REL.HI         WIND DAI           FE.T         DEGREES CENTIGRAUF         DIALCTION           5014.         28.4         13.9         41.         215.1           6772.         24.9         11.1         42.         243.1           1 6772.         24.9         11.1         42.         243.1           1 6572.         20.7         8.1         44.         227.2           1 1658.         15.0         4.7         50.         145.7           1 4657.         4.8         -1.7         40.3         7           1 1777.         4.8         -1.7         40.3         7           1 1777.         -1.7         -4.6         52.5         17           1 2555.         -8.7         -8.4         99.         59.7         13 | GEUPOTEUTIAL         TEMERATURE         REL.MI         WIND DAI           FE.T         DEGREES CENTIGRADE         DIALCTION           5014.         28.4         13.9         41.         215.1         3           6772.         24.9         11.1         42.         243.1         4           10558.         15.0         4.7         50.         145.7         1           14558.         15.0         4.7         50.         145.7         1           14770.         4.0         -1.7         53.         40.3         7           17074.         -1.7         -4.6         52.5         17           22199.         -12.7         -21.1         49.         66.8         4 | GEUPOTEITIAL         TEMERATURE         REL.HIL.         WIND DAI           FELT         DEGREES CENTIGRADE         DEGREES(TRI)           5014.         28.4         13.9         41.         215.1         245.1         42.         243.1         44.         227.2         34.1         34.1         42.         243.1         44.         227.2         34.1         34.2         243.1         44.         227.2         34.1         34.2         34.3         34.1         34.2         34.3         34.2         34.3         34.2         34.3         34.2         34.3         34.2         34.3         34.2         34.3         34.2         34.3         34.2         34.3         34.2         34.3         34.2         34.3         34.2         34.3         34.2         34.3         34.2         34.3         34.2         34.3         34.2         34.3         34.2 |

| 6E ODETIC COOKDINATES<br>32-40175 LAT DEG<br>106-31232 LOW DEN                    |  |        |        |        |        |         |         |         |         |         |         |         |        |         |         |         |         |         |
|---|--|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|
| DATA  | REL.HUM.<br>PERCENT                                  | 55.0   | 48.0   | 0.00   | 0.5.4  | 0.04    | 54.0    | 67.0    | 82.0    | 7.3.0   | 0.09    | 0.03    | 33.0   | 64.0    | 45.0    | 74.0    | 65.0    | 01.0    |
| SIGNIFICANT LEVLL DATA 2010140161 LC-37 FABLE 9                                   | TEMPFRATURE<br>AIR DEWPUINT<br>DFGHEES CENTIGRADE    | 13.7   |        |        | 200    |         |         | 2 ct -  |         |         |         |         |        |         |         |         |         | -36.7   |
| SIGNIFI<br>2<br>LC<br>TABLE 9   | 1EMF<br>AIR<br>DFGREES                               | 23.2   | 26.6   | 27.1   | 22.5   | 15.4    | 8.0     | ٠,      | 0.9-    | -7.4    | -11.0   | -11.5   | -14.5  | -17.2   | -18.1   | -21.4   | -26.8   | -31.7   |
| 115L<br>D <b>7</b>  | PLESSURE GEOMETAIC<br>ALTITUDE<br>MILLIBARS ASL FEET | 4051.4 | 4622.1 | 5016.0 | 7815,2 | 10559.6 | 13504.0 | 16282.9 | 18752.5 | 19552.6 | 21335.4 | 21783.7 | 240042 | 25167.6 | 25804.1 | 27184.3 | 30019.2 | 32075.7 |
| STATION ALIITUUL 4051.37 FEET HSL<br>20 JULY 81 0736 HRS MDF<br>ASCENSIUM NO. 101 | PivESSUR<br>MILLIBAR                                 | 9.48€  | 0.190  | 0.050  | 171.4  | 2000    | n29•0   | 567.0   | 515.8   | 200∙0   | 7.994   | 158.0   | 419.2  | 0.004   | 3.69.6  | 368•4   | 327.4   | 300.0   |

| . T                   |             |                                       |                               |           | OFFICE ALK UAL    | 4 4 7          |                           | ,              |                      |  |
|-----------------------|-------------|---------------------------------------|-------------------------------|-----------|-------------------|----------------|---------------------------|----------------|----------------------|--|
| STATISM ACTIONS       | ווייטער יע  | 1031637 FEGT                          | ין קרוני<br>ביים יו           |           | 2010470161        | <b>1</b> 0     |                           | GEODE II       | GEODETIC COOMITMATES |  |
| ASC. 17 101 110       |             | U/SO HIKS MUL                         | <u> </u>                      |           | LC-37             |                |                           | 32.            | 32.40175 LAT DEG     |  |
| 104c1172c1            | •           |                                       |                               | ,-        | TABLE 10          |                |                           | 106.           | 51252 LON DEG        |  |
| GEOMETHIC             | PRESSURE    | 154                                   | EMPERATURE                    | REL.HUM.  | DENSIT,           | SPEEN OF       | ALMU DATA                 | ΤA             | INUFX                |  |
| ALIIIUUE<br>1984 FELT | MILLIBARS   | A IR<br>DEGREES                       | <b>DEWPOINT</b><br>CENTIGRADE | PERCENT   | GM/CUBIC<br>METER | SUUND<br>KNOTS | DIKF, TION<br>DEGREFS(1N) | SPEED<br>KNOTS | OF<br>REFHACTION     |  |
| 4051.4                | -           | 23.2                                  | 13.7                          | 55.0      | 1020.1            | 672.4          | 140.0                     | 4.1            | 1.000246             |  |
| 4500.0                |             | 25.9                                  | 14.5                          | 49.5      | 1000.7            | 676.1          | 1.9.0                     | 3.8            | 1.000293             |  |
| 500 <b>0•</b> 0       |             | 27.1                                  | 13.8                          | 44.2      | 979.9             |                | 1.59.0                    | 3.5            | 1.000205             |  |
| 5500+0                | 835.9       | 26.3                                  | 13.0                          | 43.8      | 965.R             |                | 138.3                     | 3.2            | 1.000279             |  |
| <b>6∙0</b> 000        | •           | 25.5                                  | 12.2                          | 43.6      | 952.0             |                | 143.9                     | 2.5            | 1.000273             |  |
| 0500°                 | 80/08       | 24.7                                  | 11.4                          | 43.5      | 934.5             |                | 104.0                     | 1.7            | 1.000267             |  |
| 0.0007                |             | 25.8                                  | 10.6                          | 43.5      | 925.1             | 673.4          | 222.9                     | ο.             | 1.000261             |  |
| 0.6057                |             | 23.0                                  | <b>6</b> •6                   | 43.1      | 911.9             | 672.4          | 2-10-4                    | 1.8            | 1 • 000256           |  |
| i-0000                |             | 22.0                                  | 0.6                           | # P P P   | 899.3             | 671.2          | 301.5                     | 2.2            | 1.000250             |  |
| 5500.0                |             | 20.7                                  | ස<br>• •                      | 44.5      | 887.6             | 1.699          | 305.5                     | 1.1            | 1.000246             |  |
| 0.0006                |             | 19.4                                  | 7.4                           | 45.6      | 870.1             | <b>068</b> •1  | 59.5                      | ~              | 1.000241             |  |
| 0.0002                | 126.1       | 18.1                                  | 9.9                           | 46.7      | 864.7             |                | 114.5                     | 1.3            | 1.000236             |  |
| 0.0001                |             | 10.0                                  | 2•5                           | 8°/5      | 853.5             | _              | H3•5                      | æ.             | 1.000232             |  |
| 0.00501               | 0107        | 15.6                                  | •                             | 5 · 0 · 0 | 842.5             |                | a•5                       | 1.1            | 1.000227             |  |
| 110000-0              |             | 5 · 5 ·                               | 0•†                           | 1.64      | 831.2             |                | 9.0%                      | 5.9            | 1.000222             |  |
| 13500.0               | 0,070       | 13.0                                  | 3.0                           | 20.6      | 820.0             | 5000           | 657<br>6.03               | ທີ່            | 1.000218             |  |
| 12000-0               | _           | 11.8                                  | 2•1                           | 51.4      | 80H.9             | 658.9          | 27.5                      | 7.2            | 1.000213             |  |
| 1250000               |             | 10.5<br>10.5                          | 1.2                           | 52.3      | 79H.0             | 657.4          | 57.9                      | <b>7.</b> 6    | 1.000209             |  |
| 00000                 | 040.0       | ?<br>•                                | N I                           | 53.1      | 787.3             | 655.9          | 33.2                      | 11.0           | 1.000205             |  |
| D.D.C.T               |             | · ·                                   | •                             | 24.0      | 7.6.7             |                | 21.0                      | 12.7           | 1.000201             |  |
| 0.000+T               | 61/10       | 9.0                                   | -1.5                          | 56.3      | 766.3             | _              | 44.5                      | 14.2           | 1.000197             |  |
| 14,500 - 13           |             | N C                                   | -2.5                          | 58.7      | 756.0             | 651.0          | 1.94                      | 15.7           | 1.000194             |  |
| 6.600CT               | 0.440       |                                       | 0.5-                          | 61.0      | 745.9             | 649-3          | 47.7                      | 14.9           | 1.000190             |  |
| 1.000.0               |             | * ·                                   | ລ•ຕຸ.                         | 55.5      | 755.9             | 1.1.00         | 0 • 6 ±                   | 14.1           | 1.000167             |  |
| 10000                 | 0.07        | 1•0                                   | <b></b>                       | 65.7      | 725.1             | 646.0          | 5000                      | 12.7           | 1.000184             |  |
| 0.01,401              |             | ?.                                    | -5.5                          | 68.3      | 710.1             | 6,440.5        | 51.5                      | 11.7           | 1.000180             |  |
| Ů•0µ(r/1              | 227.0       | -1.6                                  | -6.1                          | 71.4      | 705.R             | 8.740          | 54.5                      | 11.7           | 1.000177             |  |
| 1,000                 |             | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | 9.9                           | 74.4      | 695.7             | 641.3          | 5.5°5                     | 12.0           | 1.000174             |  |
| •                     |             |                                       | -7-5                          | 77.4      | 685.7             | 639.8          | <b>5.</b> ± 50            | 12.5           | 1.000171             |  |
| 0.66601               |             | ÷.0•                                  | -8.5                          | 80.5      | 672.9             | 638.3          | 2.90                      | 12.4           | 1.000168             |  |
| 0.000T                | 6.01C       | 9-6-                                  | <b>†•6-</b>                   | 79.2      | 665.A             | 636.9          | 3.7.5                     | 11.9           | 1.0000               |  |
| 195,00                |             | -7-3                                  | -11.2                         | 73.6      | 655.3             | 635•H          | 59.0                      | 11.2           | 1.000160             |  |
| 20000                 | •           | -8.3                                  | -12.6                         | 71.2      | 645.1             | 034•6          | 1.50                      | 10.4           | 1.000156             |  |
| 0.00c02               |             | 5°5                                   | -13.9                         | 69•3      | 635.0             | 633.3          | n•+a                      | 9.6            | 1.000153             |  |
| 210005                |             | -10.3                                 | -15.2                         | 67.3      | 625.2             | 632.1          | 6•60                      | 8.9            | 1.000150             |  |
| 21500.0               | 65          | -11.5                                 | -18.1                         | 56.5      | 615.2             | 630.9          | 2.74                      | 8.1            | 1.000145             |  |
| 751100+D              | 454.1       | -11.8                                 | -22•8                         | 39.3      | 0.4.              | 030-1          | 6.7.                      | 7.4            | 1.000140             |  |
| 22500.n               | <b>4</b> 5. | -12.5                                 | -23.9                         | 37.7      | 594.4             | 6.650          | 5.7.3                     | 7.0            | 1.000137             |  |
|                       | 430.3       | -13.1                                 | -25.0                         | 36.2      | 584.2             | 026.4          | 45.5                      | 7.0            | 1.060135             |  |
| , 3500.               | •           | -13.8                                 | U-92_                         | 34.6      | 574.2             | 627.6          | 7.50                      | 7.6            | 1.000152             |  |
|                       |             |                                       |                               |           |                   |                |                           |                | J                    |  |

| STATION ALIITUDE 4051.37 FEET MSL<br>20 JULY AL 073M MR MI | ^15L               | _                | UPPER AIR DATA<br>20101H0161<br>LC-37 | Alno<br>14 |                 | GE ODET 1 | GEODETIC COORDINATES<br>32.40175 LAT DEG |
|--|--------------------|------------------|---------------------------------------|------------|-----------------|-----------|--|
| _  |                    |                  | F(=3,                                 |            |                 | 106.      | 31232 L                                  |
|  |                    | _                | TABLE 10 COH'T                        | T-10       |                 |           | Ť  |
| <  | <b>TEMPEKATURE</b> | REL.HIM. DENSITY |                                       | SPERU OF   | , INL DATA      | TA.       | INUEX                                    |
| ω.   | DEMPOSINT          | PERCENT          | t                                     | Sourt      | DIRECTION (TAX) | SPEED     | OF SEEDING TION                          |
| z  | DEGREES CENTICHADE |                  | אני ובא<br>היי                        | 2          | DEGREE STIND    | 0.024     | NEW WALL STORY                           |
| •  | -27.2              | 33.0             | 564.4                                 | 620.7      | 1.9%            | 7.6       | 1.000129                                 |
| ٠  | -26.5              | 38.5             | 555.6                                 | 625+3      | 51.9            | 6.9       | 1.000128                                 |
| ı  | -20-1              | 44.1             | 54n.9                                 |            | 16.4            | 5.8       | 1.000126                                 |
| 1  | -26.6              | 45.5             | 537.8                                 |            | 3<br>3          | 4.7       | 1.000124                                 |
| ï  | 9.93               | 49.1             | 52 h . B                              |            | ٧٠٧             | 3.<br>E   | 1.000122                                 |
| ï  | 25.6               | 59.6             | 520.5                                 |            | 17.6            | 2.3       | 1.000120                                 |
| ï  | 6.45               | 70.1             | 512.3                                 |            | 24.6            | 1.7       | 1.000119                                 |
| 1  | 25.5               | 73.0             | 503.9                                 |            | 51.9            | 1.5       | 1.000117                                 |
| 1  | -26.7              | 71.4             | 495.5                                 |            | 351.7           | 1.5       | 1.000115                                 |
| ì  | 27.8               | 69.8             | 487.1                                 |            | 321.2           | 5.5       | 1.000112                                 |
| 1  | 59.0               | 68.2             | 479.0                                 |            | 311.1           | 0.4       | 1.000110                                 |
| 1  | 30.1               | 9•99             | 470.9                                 |            | 308.0           | 5.7       | 1.000108                                 |
| 1  | 31.3               | 65.1             | 463.0                                 |            | 308.0           | 7.0       | 1.000106                                 |
| 1  | -32.6              | 64.1             | 455.5                                 | 610.2      | 309.6           | 7.7       | 1.000104                                 |
| 1  | 33.9               | 63.1             | 444.1                                 |            |                 |           | 1.000102                                 |
| ı  | -35.2              | 62.1             | 0.04h                                 |            |                 |           | 1.000100                                 |
| •  | 36.5               | 61.1             | 433.B                                 |            |                 |           | 1.00008                                  |

| FEET MSL           |             |
|--------------------|-------------|
| - 4051.37 FEET HSL | 11          |
| LIITUDE            | 10. 10. 101 |
| STATION<br>20 JULY | ASCETTS TO: |

CANDATORY LEVELS
2010160161

| æ                | SPEED<br>KNOTS             | S.  | , pr   |  |  | 7.   | 197   |  | ٠,   |   | ی ب   |   | 2   |   |
|------------------|----------------------------|---|--|--|--|--|---|--|--|---|---|---|---|---|
| WILL DAT         | DIK, CTION<br>DEGREES (TN) |   |  |  |  |  |   |  |  |   |   |   |   |   |
| HEL.HUM.         | PERCENT                    | •<br>†  | 4.50   | , c  |  | 2.5  | •04   | 72.  | 7.3  | 39.   | 40.   | 20.   | 61.   |   |
| RATURE           | DEWPOTING:<br>ENTIGRADE    | 13.8  | 11.0   | 8  | ÷ ÷  | 1.0  | -2.4  | <b>-6.</b> 2   | -11.4  | -23.3   | -26.0   | -27.6   | -36.7   |   |
| TFMyE            | AIR<br>DEGREES C           | 27.1  | 24.5   | 20.4   | 15.4   | 10.3   | t.5   | -1.a   | ₽• <b>/</b> -  | -12.1   | -17.2   | -23.7   | -31.7   |   |
| <b>UPOTENTIA</b> | FEET                       | 5n12.   | 6765.  | 8609.  | 10549.   | 12594.   | 14760.  | 17061.   | 19525.   | 22193.  | 25125.  | 28370.  | 32011.  |   |
| PRESSURE GE      | MILLIAAKS                  | P50.0   | 809.0  | 756.0  | 700.0  | 6.50 • 0   | F.00.0  | 550.0  | 200.0  | 456.0   | 400.0   | 350.0   | 300.0   |   |
|                  | EL.HUM.                    | PRESSURE GEOPOTENTIAL TFM-ERATURE KEL-HUM. WIND DATA<br>AIR DEWPOIM: PEKCENT DIK.CTION SPEED<br>MILLIRAKS FEET DEGREES CENTIGRADE DEGREES(TN) KNOTS | GEUPOTENTIAL TFM-ERATURE KEL.HUM. WIHU DAT<br>AIR DEWPOIN, PEKCENT DIR.CTION<br>FEET DEGREES CENTIGRADE DEGREES(TN)<br>0 5612. 27.1 13.8 44. 139.0 3 | GEUPOTENTIAL TEMPERATURE REL.HUM. WIHU DATAR PERCENT DIRECTION FLET DEGREES CENTIGRADE USGREES(TN) 0 5012. 27.1 13.8 44. 139.0 3 | GEUPOTENTIAL TFM-ERATURE KEL-HUM. WIHU DATAR AIR DEWPOTH, PERCENT DIR-CTION FLET DEGREES CENTIGRANE DEGREES(TN) D 5012. 27.1 13.8 44. 139.0 3 D 6765. 24.2 11.0 43. 185.2 1 D 8609. 20.4 8.0 45. 104.0 | GEUPOTENTIAL TFM-ERATURE REL.HUM. WIHD DATA AIR DEWPOIN, PEKCENT DIR.CTION DEGREES CENTIGRANE DEGREES(TN)  D 5012. 27.1 13.8 44. 139.0 3  0 5755. 24.2 11.0 43. 185.2 1  0 8609. 20.4 8.0 45. 304.0  0 10549. 15.4 4.8 49. | GEUPOTENTIAL TFM-ERATURE REL.HUM. WIHD DATAR DEWPOIN, PERCENT DIR.CTION FEET DEGREES CENTIGRANE DEGREES(TN) D 5012. 27.1 13.8 44. 139.0 3 D 6765. 24.2 11.0 43. 185.2 1 D 8609. 20.4 8.0 45. 308.0 D 10549. 15.4 4.8 49. 52. 28.9 | GEUPOTENTIAL TFM-ERATURE REL.HUM. WIHU DATAR DEWPOIN, PEKCENT DIR.CTION  FEET DEGREES CENTIGRANE DEGREES(TN)  50 5612. 27.1 13.8 44. 139.0 3  60 665. 24.2 11.0 43. 185.2 1  60 669. 20.4 8.0 45. 308.0  10549. 10.3 1.0 52. 28.9 9  14760. 4.5 -2.0 60. 47.0 15 | GEUPOTENTIAL TFM-ERATURE REL.HUM. WIHU DATAR DEWPOIN, PEKCENT DIR.CTION DEGREES CENTIGRANE DEGREES (TN)  10 5612. 27.1 13.8 44. 139.0 3  10 6765. 24.2 11.0 43. 185.2 1  10 10549. 20.4 8.0 45. 308.0  10 12594. 10.3 1.0 52. 28.9 9  14760. 4.5 -2.0 60.4 47.0 15 | GEUPOTENTIAL TFM-ERATURE REL-HUM. WIHU DATAR DEWPOIN, PEKCENT DIR.CTION DEGREES CENTIGRANE DEGREES(TN)  1 5012. 27.1 13.8 44. 139.0 3  1 6765. 24.2 11.0 43. 185.2 1  1 6769. 20.4 8.0 45. 308.0  1 1559. 15.4 4.1 49. 5.9 9  1 12594. 10.3 1.0 52. 28.9 9  1 1760. 4.5 -2.1 60. 47.0 15  1 176611.8 -6.2 72. 54.9 11 | GEUPOTENTIAL TFM-ERATURE REL-HUM. WILLU DATA AIR DEWPOIN, PERCENT DIR-CTION DEGREES CENTIGRANE DEGREES(TN)  50 5012. 27.1 13.8 44. 139.0 3  50 6765. 24.2 11.0 43. 185.2 1  6765. 24.2 11.0 43. 185.2 1  10549. 15.4 4.8 49. 50.0  12594. 10.3 1.0 52. 28.9 9  14760. 4.5 -2.1 60. 47.0 15  170611.8 -6.2 72. 52.5 11  2219312.1 -23.3 39. 63.5 | GEUPOTENTIAL TFM-ERATURE REL-HUM. WILLU DATA AIR DEWPOIN, PERCENT DIR-CTION DEGREES CENTIGRANE DEGREES(TN)  5012. 27.1 13.8 44. 139.0 3  5012. 27.1 13.8 44. 139.0 3  5012. 27.1 13.8 44. 139.0 3  5012. 27.1 13.8 44. 139.0 3  5012. 27.1 11.0 43. 185.2 1  6019. 20.4 8.0 45. 50.0 1  6019. 15.4 4.0 52. 52.9 9  6019. 17.0 4.5 -2.0 60. 47.0 15  6019. 17.0 1.0 12.1 -23.3 39. 63.5 7  6219312.1 -23.3 39. 63.5 7  6219517.2 -26.0 40.1 14.3 | GEUPOTENTIAL TFM-ERATURE REL.HUM. WILLD DATA  AIR DEWPOIN, PEKCENT DIR.CTION  FEET DEGREES CENTIGRANE  5612. 27.1 13.8 44. 139.0 3  6765. 24.2 11.0 43. 186.2 1  8609. 20.4 80. 45. 308.0  10549. 15.4 4.8 49. 528.9  12594. 10.3 1.0 52. 28.9  14760. 4.5 -2.0 60. 47.0 15  170611.8 -6.2 72. 52.5 11  2212312.1 -23.3 39. 63.5 7  2837023.7 -27.6 70. 314.3 5 | GEUPOTENTIAL TFM-ERATURE REL.HUM. WILLD DATA  AIR DEWPOIN, PEKCENT DIR.CTION  FEET DEGREES CENTIGRANE  5612. 27.1 13.8 44. 139.0 3  6765. 24.2 11.0 43. 186.2 1  8609. 20.4 80.0 45. 308.0  10549. 15.4 4.8 49. 508.9  12594. 10.3 1.0 52. 28.9  14760. 4.5 -2.0 60. 47.0 15  170611.8 -6.2 72. 52.5 11  2512517.2 -26.0 40.0 14.3 5  2512517.2 -26.0 40.0 324.8 2  3501131.7 -36.7 61. |

| JYHYTO FEET MSL | TOPE SHIP ISON    |
|-----------------|-------------------|
|                 | ASCEUSION NO. 464 |

6EUDETIC CO040114ATES 32.40043 LAT DEG 106.37033 LOH CEG

| UATA   | HEL. HUM.<br>PERCENT<br>40.0<br>48.0<br>48.0<br>43.0<br>43.0<br>43.0<br>82.0<br>81.0<br>50.0<br>41.0<br>56.0  |
|--|---|
| SIGIIFICANT LEVEL<br>2010020469<br>WHITE SANUS | 3LE 12 1EMPERATURE 1R DEWPOINT NEES CENTIGHADE 0 13.4 0 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4   |
| SIGH   | 7AE<br>0156<br>255<br>255<br>255<br>256<br>266<br>156<br>156  |
| 830 IKS MDT                                    | PAESSURE GLOGIETRIC<br>ALTITUDE<br>ALTITUDE<br>ALTITUDE<br>581-8 3989-0<br>656-0 5052-3<br>637-8 5470-4<br>799-4 6826-0<br>751-4 4899-3<br>700-0 19606-3<br>476-0 20867-6<br>460-4 21716-7<br>422-8 23868-6 |

| STATION ALITTUD | . 39                                    | 3989.00 FEET MS                               | T MSL               | _          | UPPLR AIR UAT ZalnOzuqéa | 0 t t 0 t 1 t 1 t 1 t 1 t 1 t 1 t 1 t 1 |              | ot 00£11    | OF ODE TIC COMMINATES                 |
|-----------------|---|---|---------------------|------------|--------------------------|---|--------------|-------------|---------------------------------------|
| ASCE (\$10). 10 | ₩a+ •0':                                | 3   | <b>5</b>            | <b>,</b> — | WALLE SANOS              | ŝ                                       |              | 32.<br>106. | 32.40043 LAT DEG<br>106.37033 LON DEG |
| GEUIN TRIC      | PRESSURE                                | FEMP  | FEMPERATURE         | HEL.HUM.   | UENSITY                  | SPEE, OF                                | INC DATA     | <b>T</b>    | INUEX                                 |
| ALTITUDE        | #11 L 1 AR                              | AIN   | DEMPOINT            | PERCENT    | ر                        | OHIOS                                   | DIRECTION    | SPEEU       | 40                                    |
|                 | 2001                                    | DEGINEES                                      | CENTIONADE          |            | 1 L                      | N N N                                   | DEGRETS OF N | X ION X     | KEFIRACT 10K                          |
| 3489.0          | 981.8                                   | 26.8  | 12.1                | 40.0       | 1017.4                   | 676.H                                   | 140.0        | 2.9         | 1.000286                              |
| 1000±           | 841.5                                   | 20.8  | 12•1                | 40.1       | 1017.6                   | 070.1                                   | 1+0+1        | 5.9         | 1.000246                              |
| 4500.0          | 800°4                                   | 25.9  | 12.7                | 43.8       | 1002.7                   | _                                       | 1+3+1        | 3.2         | 1.000246                              |
| 200000          |   | 25.1  | 13.2                | 47.6       | 980.0                    | -                                       | 145.0        | 3.5         | 1.000285                              |
| 5200•û          |   | 25.9  | 13.3                | 45.9       | 964.1                    |   | 147.7        | 3.9         | 1.000201                              |
| 0.0000          |   | 25.4  | 12.5                | 44.8       | 953.h                    |   | 149.3        | 0.4         | 1.000274                              |
| 0500.0          |   | 24.8  | 11.7                | 43.7       | 934.1                    |   | 150.7        | 0.4         | 1.0002tvA                             |
| 7000.9          |   | 24.1  | 10.9                |            | 925.3                    | 673.A                                   | 148•0        | 3.8         | 1.000262                              |
| 7500.0          |   | 23.1  | 10.1                | 43.8       | 912.5                    |   | 143.0        | 3.6         | 1.000257                              |
| 0.000           |   | 22.1  | <b>∵</b> 66         | tt e 3     | 90n.n                    |   | 141.5        | 2.3         | 1.000252                              |
| 3500.6          |   | 21.1  | 8.7                 | 6.44       | 887.6                    |   | 144.0        | 8.          | 1.000247                              |
| 9000A           |   | 19.8  | 8•0                 | 46.4       | 876.0                    | _                                       | 37.0         | .2          | 1.000243                              |
| 0.0056          |   | 18.5  | 7.3                 | 48.2       | 864.8                    | 0.700                                   | ດ<br>• ຄ     |             | 1.000238                              |
| 10000.          |   | 17.1  | 9•9                 | 6.64       | 853.7                    | -                                       | 15.3         | 1.2         | 1.000234                              |
| 0.00°.01.       |   | 15.8  | æ .                 | 51.7       | 842.7                    |   | 27.6         | 1.5         | 1.000250                              |
| 11000.0         |   | ۲.۰۰<br>د د د د د د د د د د د د د د د د د د د |                     | 53.5       | 831.2                    | _                                       | 2.02         | 2.3         | 1.000226                              |
| 11500.0         | 6.0/0                                   | 13.2  | # 1<br># 1          | 55.3       | 814.7                    | 660 • A                                 | 42.0         | 3.7         | 1.000221                              |
| 0.00021         |   | ٠,  | 3• 7                | 5/•2       | 30H.                     |   | 4.77         |             | 1.000217                              |
| 14:00:0         | 2.500                                   | 9.0   | 3•0                 | 59.1       | 7.97.2                   |   | 28.9         | 8.7         | 1.000213                              |
| 0.00051         |   | ) (   | N :                 | 6.00       | 7967                     | _                                       | D•66         | 10.2        | 1.000209                              |
| 0.0001          |   | 0.0   | <del>)</del>        | 29.29      | 175.4                    |   | / • T • T    | 12.8        |                                       |
| 14500.0         |   | 0 t   | 0 •                 | 04.0       | 7.40/                    | _                                       | T•/h         | 15.2        | 1.00001                               |
| 0-00041         |   | 0 0   | C • •               | n • 00     | 5-407                    |   | D :          | 10.5        | 1-04197                               |
| 0.00501         |   | 0   | 10.6                | 000        | 2                        |   | ສ -<br>ເກີ.  | 17.5        | #61000·1                              |
| 15.000.0        |   | 1.6   |                     | 79.07      | E 1                      |   | 1.00         | ? · / ·     | 051000-1                              |
| 16500.0         |   | 17  | T A                 | 0.57       | 714.0                    | 2 to 1                                  | N 4          | 0 d         | 1.0001                                |
| 17000-9         |   | 6.  | L.4-                | 75.7       | 704-1                    |   | 0.90         |             | 1.000179                              |
| 17,000.0        | 541.7                                   | -2.2  | -5.6                | 77.6       | 694.6                    | _                                       | 71.9         | 15.4        | 1.000170                              |
| 100001          |   | -3.5  | -6.5                | 79•4       | 685.1                    |   | 78.0         | 14.9        | 1.000172                              |
| 18509.0         | 521.9                                   | L-4-7   | -7.5                | 80.8       | 675.6                    | _                                       | 7.40         | 14.0        | 1.000169                              |
| 19009-6         | 511.9                                   | -5.6  | -8.5                | 79.5       | 664.13                   | _                                       | 41.5         | 12.1        | 1.000165                              |
| 19500-6         | 202.                                    | 7.0   | ان•د                | 78.3       | 654.3                    | 6.57.0                                  | 6.56         | 10.7        | 1.000162                              |
| 2.00007         | **************************************  | -7:1  | -11.8               | 69.3       | 643.0                    | 6300                                    | იტი          | 9.6         | 1.000157                              |
| 2020a+B         | 482.4                                   | 8./-  | -14.6               | 58.2       | 63,3.0                   | 635.1                                   | 0.Çu         | 8.9         | 1.000152                              |
| 0.00012         | C • C •                                 | ກ.<br>ສຸດ                                     | -17-4               | 48.6       | 622.46                   | _                                       | 17.1         | 8.3         | 1.000147                              |
| J.10012         | C • • • • • • • • • • • • • • • • • • • | C • 6 •                                       | 100.1-              | 7°53       | 617.3                    |   | /**/         | 7.6         | 1.0001                                |
| 0.00022         |   | 10.0  | 6.00                | 40.3       | 600 c                    |   | <b>3.</b> 50 | 7.9         | 1.000140                              |
| 6.00000         |   | 2.01-   | © • 6<br>6 6<br>6 1 | 39.2       | 597.2                    |   | o.l.:        | ತ<br>ಬ      | 1.000138                              |
| 7 - 11.1.1.5 3  |   | 6.11  | 11.07               | 30.11      | い・シェク                    | t: 50 • 5                               | 0.7.         | 1.1         | 1.000135                              |

| 04 0DETIC COORDINATES<br>32.40043 LAT REG<br>106.37033 LON REG | INDEX<br>OF<br>REFRACTION                    | 1.000286 | 1.000286 | 1.000286 | 1.000285 | 1.000201 | 1.000274 | 1.000268 | 1.000262 | 1.000257 | 1.040252    | 1.000247 | 1.000243 | 1.000238    | 1.000234 | 1.000230         | 1.000226 | 1.000221 | 1.000217  | 1.000213 | f.02000-T | 1.000205     | 1.000197 | 1.000144 | 1.000190 | 1.000186 | 1.000182 | 1.000179     | 1.000176 | 1.000172  | 1.000169 | 1.009165                                | 1.000162         | 1010101 | 2410001 | 1.000147                                 | 1.0001        | 1.000140 | 1.000138   |
|--|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|----------|----------|-------------|----------|------------------|----------|----------|-----------|----------|-----------|--------------|----------|----------|----------|----------|----------|--------------|----------|-----------|----------|---|------------------|---------|---------|--|---------------|----------|--|
| ot ODE 110   | TA<br>SPEEU<br>KNOTS                         | 2.9      | 5.9      | 3.2      | 3.5      | 3.9      | 0.4      | 0.4      | 3.0      | 3°t      | 2.3         | ₽.       |          | ۲.          | 1.2      | 1.5              | 2.3      | 3.7      | ا کو<br>ا | 8.7.     | 7.01      | 12.8         | 15.5     | 17.3     | 17.3     | 16.8     | 15.8     | 15.5         | 3°01     | 14.9      | 14.0     | 12.1                                    | 10.7             | c (     | S .     | ۳.<br>۱                                  | o :           | •        | 7.7  |
|  | INL DATA<br>DINELTION S<br>DEGREES(IN) K     | 140.0    | 140.1    | 1+3+1    | 145.6    | 147.7    | 149.3    | 1:00-1   | 148.t    | 143.0    | 141.5       | 144.0    | 37.0     | <b>c.</b> 5 | 15.3     | 27.6             | Z-927    | 75.0     | b•27      | 28.9     | ) • C ·   | (†)          | T        | .11.0    | 1.50     | ¥•¢¢     | *•0÷     | ŋ•ŋ <u>•</u> | 71.5     | n•9/      | 7. to    | 71.5                                    | ? • ? ;<br>• ? ; | n :     | 20.00   | 77.1                                     |               | ာ :<br>တ | 47.5   |
| H UATA<br>Hubs<br>Auds<br>CON'T                                | SPEED OF<br>SOUND<br>KNOTS                   | 676.H    | 07007    | 675.9    | 675.1    | 0.970    | 675.3    | 674.7    | 673.A    | 672.6    | 671.4       | 6701.2   | phb.n    | 0 · / ciq   | 4.500    | 063.A            | 662.3    | ₽€09•H   | 659.2     | 657.7    | 0.000     | 654.6        | 653•1    | 650.0    | 648·4    | 540.d    | 1045+3   | 643.7        | 642.1    | 9.049     | 1.650    | 636.0                                   | 6.57.0           | 0.000   | 655.1   | 634.2                                    | 5.cca         | 632.2    | 654.5  |
| UPPER ATH DAT<br>POLNOZNAGU<br>WHITE SANDS<br>TABLE 13 CONT    | UEHSITY S<br>GM/CURIL<br>METER               | 1017.9   | 1017.6   | 1002.7   | 980.0    | 964.3    | 953.6    | 934.1    | 925.3    | 912.5    | 0.006       | 887.6    | 876.0    | 864.8       | 853.7    | 842.7            | 831.2    | 814.7    | 80H.4     | 7.77.2   | 2.00/     | 175.4        | 7-40/    | 743.0    | 733.B    | 72.5.7   | 713.9    | 704.1        | 9.469    | 685.1     | 6/5.6    | £ 4.09                                  | 654.5            | 0.0.0   | 55.50   | 622.6                                    | 5170          | 2.×09    | α.γ.<br>α.γ.<br>α.γ.<br>α.γ.<br>α.γ.<br>α.γ.<br>α.γ.<br>α.γ. |
| -  | REL.HUM.<br>PERCENT                          | 40.0     | 40.1     | 43.8     | 47.6     | 45.9     | 44.8     | 43.7     | 43.2     | 43.8     | £ 44        | 6.44     | 46.4     | 48.2        | 6.64     | $\frac{51.7}{2}$ | 53.5     | 55.3     | 57.2      | 59.1     | 6.00      | 62.8         | 66.5     | 68,3     | 70.2     | 72.0     | 73.9     | 75.7         | 77.6     | ± • 6/    | 80.8     | 6.67                                    | 78.3             | 0.00    | 24.6    | 48.6                                     | ) • O :       | 0.0      | 38.0<br>38.0   |
| T eist   | TEMPERATURE<br>IN DEMPOINT<br>LES CLHTIGRADE | 12+1     | 12.1     | 12.7     | 13.2     | 13.3     | 12.5     | 11.7     | 10.9     | 10.1     | <b>†•</b> 6 | 8.7      | 0∙8      | 7•3         | 9•9      | 5.8              | 5•1      | # (      | 3.7       | 0.0      | 2.7       | <b>1 • t</b> | •        | 1        | -2-0     | -2.9     | 8•K-     | 7.41-        | -5.6     | ဂ (<br>() | -7.5     | က<br>က                                  | <b>9</b> •6-     | 0.11-   | 1.4.1.  | -17-4                                    |               | 6.02     | -23.0  |
| 3989440 FEET M<br>0831 LRS MDF<br>4                            | TEMPI<br>AIN<br>DECREES                      | 26.8     | 20.8     | 25.9     | 25.1     | 25.9     | 25.4     | 54.8     | 24.1     | 23.1     | 22.1        | 21.1     | 19.8     | 18.5        | 17.1     | 15.8             | 14.5     | 13.2     | 11.3      | 9.00     | )<br>• (  | 0.0          | ) (C     | 200      | 2•9      | 1.6      | ņ        | 6.1          | 2.5      | n•n-      | · · · ·  | o•c-                                    | • t              |         | 9.7-    |  | 0.00          | 1001     | -11.6  |
| 17 J   | PRESSURL<br>MILLIDARS                        | 981.8    | 841.5    | 800.4    | 851.5    | 830.9    | 822.6    | 800.5    | 94.0     | 780•8    | 101.5       | 154.0    | 740.8    | 127.8       | 715.0    | 702.4            | 9.689    | 6,079    | 4.494     | 2000     | 7.00      | 6.020        | 605.5    | 504.4    | 587.5    | 572.7    | 202.5    | 551.0<br>1   | 541.7    | 7.100     | 521.9    | 6 • TTC                                 | 1.200            | 0 764   | 10701   | 1.5.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4. | C + 0 + 7 = 7 | 0 m      | 437.6  |
| 5741,68 /LITU<br>20 JILY 31<br>854E \$106 40.                  | GEO, IF TRICALITY OF PERT                    | 3489.0   | J•000+   | 4500.0   |          | 5.000cs  | 3•600a   | 0.0000   | C•Uu0/   | 7500.0   | •           | •        | •        | 9500•       | •        | ٠                | 11000.0  | 150n     | 2000      | 1.5500.0 | 0000      | 10598.0      | 14507.0  | 000      | _        | •        | 10500.0  | •            | 000/     | 10000     | 10:00    | 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 3.00361          | 3.00000 | •       | •  |               | 0.00077  | 23000.0  |

| .FODETIC COOKDINATES<br>32.40043 LAT DEG<br>106.37033 LON LEG | Inut x<br>OF<br>REFRACTION   | 1.000132<br>1.000130<br>1.000129                         |
|---|--|--|
| .,FODET1C<br>32.4u<br>106.37                                  |  | 9•9  |
|   | "IND DATA<br>DIRFCTION SPEED<br>DEGREES(IN) KNOTS  | 0.00   |
| 1, NO.  |  | 572.6 629.4<br>563.3 628.3<br>554.8 626.8<br>546.4 625.3 |
| PATE SALUS WHITE SALUS TABLE 13 CON'T                         | HEL.HUM. DENSITY SPEEL OF PERCENT GM/CUBIC SOUND METER KNUTS                                 | 572.6<br>563.3<br>554.8<br>546.4                         |
| 5   | REL.HIM.   | 36.9<br>37.8<br>44.7<br>51.6                             |
| т nSL<br>h <b>ฏ</b> т   | GEOWETHIC PRESSURE TEMPERATURE HALTAINUNE AIK DEWPOINT HISE FEL MILLIWARS DEAKTES CENTIGRADE | -24.0<br>-24.5<br>-23.8                                  |
| 3489.00 FEFT 115L<br>083n 11115 HIDT                          | TEMP<br>AIR<br>DEGREES   | -12.3<br>-13.2<br>-14.5<br>-15.8                         |
| 111UUL 3y8<br>0<br>.0 404                                     | PRESSURE<br>HILLIDARS  | 429.0<br>420.6<br>412.2                                  |
| STATION ALITIULE SO ULT BE ASCETISTON NO. 40                  | GEUNETHIC PRESSURE<br>ALTAINUE<br>NSC FEET MICLIDARS   | 0.000452<br>0.004452<br>0.0064552                        |

| LANDATORY LEVELS   | 2n1002n464                       | WHITE SALLUS      |
|--|----------------------------------|-------------------|
| The state of the s | STATION ALITIDE SYSS-NO FEET MSL | ASCENSION NO. 464 |

| TEM!ERATURE RE<br>AIR DEWPOIN! PE<br>25.0 13.2<br>24.5 11.1<br>20.4 8.5<br>10.4 2.4<br>4.8 -77<br>-1.2 -4.4<br>-6.6 -9.8   | ITAL   TEM; ERATURE   HEL.HUM.   WIND DA   | 464 BSO NKS MOT |            | <b>—</b>    | 2010020464<br>WHITE SAMUS<br>TABLE 14 | 4 V        |                            | 6E0DETIC COOKUTUATES<br>32.40043 LAT DEG<br>106.37033 LOIJ DEG |
|--|--|-----------------|------------|-------------|---------------------------------------|------------|----------------------------|--|
| FEET DEGREES CENTIGRANF DIRFLEION DIRFLESTIN)  | FEET DEGREES CENTIGRANF PERCENI DIRPLETON DIRP | ř               | OPOTENTIAL | TEM!<br>AIR | ERATURE<br>DFPOT.                     | KEL . HUM. | MIND DA                    | NIA.   |
| 5049. 25.0 13.2 46. 145.6 64.6 64.6 67.9 46. 145.6 67.9 64.6 15.5 10.1 10.1 10.1 10.1 10.1 10.1 10.1   | 5049.     25.0     13.2     46.     145.6       6799.     24.5     11.1     43.     150.6       8644.     20.8     8.5     45.     150.1       10586.     15.5     5.7     52.     29.2       12633.     10.4     2.8     59.     30.1       14601.     4.8     -7     67.     51.3       17108.     -1.2     -4.8     76.     67.4       19578.     -6.6     -9.8     76.     64.6       22262.     -10.5     -21.5     40.     64.6       25208.     -16.4     -23.3     55.   |                 |            | EGREES      | CENTIGRALLE                           | reacen.    | DIK, C. LON<br>DEGREES(TN) | SPELD<br>KNOTS   |
| 6799. 24.5 11.1 43. 150.6 8644. 20.6 8.5 45. 150.6 150.1 10586. 15.5 5.7 52. 29.2 120.33. 10.4 2.8 59. 30.1 14801. 4.8 -7 67. 51.3 171081.2 -4.8 76. 67.4 195786.6 -9.8 76. 64.6 55.08 | 6799. 24.5 11.1 43. 150.6 8644. 20.8 8.5 45. 150.6 150.1 10586. 15.5 5.7 52. 29.2 126.33. 10.4 2.8 59. 30.1 14801. 4.8 -7 67. 51.3 171081.2 -4.8 76. 67.4 195786.6 -9.8 76. 64.6 2526210.5 -21.5 40. 64.6 2520816.4 -23.5 55.  |                 | 5049.      | 25.0        | 13.2                                  | 47.4       | # X = X = X = X = X = X    | <b>V</b>   |
| 8644. 20.6 8.5 45. 150.1 10586. 15.5 5.7 5.2 29.2 126.33. 10.4 2.8 59. 30.1 171081.2 -4.8 76. 67.4 195786.6 -9.8 76. 64.6 55.0 57.0 51.3 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55         | 8644. 20.6 8.5 45. 150.1 10586. 15.5 5.7 52. 29.2 126.33. 10.4 2.8 59. 30.1 14801. 4.8 -7.7 67. 51.3 171081.2 -4.8 76. 64.6 2526210.5 -21.5 40. 64.6 2520816.4 -23.5 55.   |                 | 6629       | 24.5        |                                       | ; ;        | 3.04                       | 9.0  |
| 10586. 15.5 5.7 52. 29.2 120.1 140.1 140.1 14.8 7 67. 51.3 171081.2 -4.8 76. 67.4 195786.6 -9.8 76. 64.6 54.6 54.6   | 10586. 15.5 5.7 52. 29.2 120.1 14001. 4.87 67. 51.3 171081.2 -4.8 76. 67.4 195786.6 -9.8 76. 64.6 2526210.5 -21.5 40. 64.6 2520816.4 -23.3 55.   |                 | 8644       | 20.8        | 8.5                                   | ) ii       | 0.001                      | ۶.°C   |
| 12033. 10.4 2.4 59. 29.2 17.00. 4.8 -7.7 57. 51.3 195786.6 -9.8 76. 64.6 54.6 55.08  | 12633. 10.4 2.4 59. 29.2 140.1 4.87 67. 51.3 171081.2 -4.8 76. 67.4 195786.6 -9.8 76. 91.8 2226210.5 -21.5 40. 64.6 2520816.4 -23.3 55.  |                 | 10586.     | 15.5        |                                       | ָ<br>בּי   |                            | <b>.</b>   |
| 14601. 4.87 67. 51.3<br>171081.2 -4.8 76. 67.4<br>195786.6 -9.8 76. 91.8<br>2226210.5 -21.5 40. 64.6   | 14801. 4.87 67. 59. 30.1 171081.2 -4.8 76. 51.3 195786.6 -9.8 76. 91.8 2256210.5 -21.5 40. 64.6 2520816.4 -23.3 55.  |                 | 126.43     |             |                                       | 24.        |                            | 1.6  |
| 171081.2 -4.4 76. 51.3<br>171081.2 -4.4 76. 67.4<br>195786.6 -9.4 76. 91.8<br>2226210.5 -21.5 40. 64.6   | 171081.2 -4.4 76. 51.3<br>171081.2 -4.4 76. 67.4<br>195786.6 -9.4 76. 91.8<br>2226210.5 -21.5 40. 64.6<br>2520816.4 -23.5 55.  |                 |            | <b>7</b>    | ¥.                                    | 29.        |                            | <b>8.</b> 5  |
| 1/1081.2 -4.8 76. 67.4<br>195786.6 -9.8 76. 91.8<br>2226210.5 -21.5 40. 64.6   | 1/1081.2 -4.8 76. 67.4<br>195786.6 -9.8 76. 91.8<br>2226210.5 -21.5 40. 64.6<br>2520816.4 -23.5 55.  |                 | 14001.     | 8           | ~:                                    | 67.        |                            | 7.3  |
| 19578. $-6.6$ $-9.8$ $7a$ $91.8$ $22262$ $-10.5$ $-21.5$ $40$ $64.6$   | 195786.6 -9.8 76. 91.8<br>2226210.5 -21.5 40. 64.6<br>2520816.4 -23.3 55.  |                 | 1/108.     | -1.5        | エ・サー                                  | 76.        |                            | 3  |
| 2226210.5 -21.5 40. 64.6   | 2226210.5 -21.5 40. 64.6<br>2520816.4 -23.3 55.  |                 | 19578.     | 9.9-        | ₩•6-                                  | 78.        |                            | 7 tf   |
| 0.500 11 11 0.500 04.0   | 2520816.4 -23.3 55.  |                 | 22262.     | -10.5       | 2010                                  |            |                            | ) i  |
|  | C.CZ. +101.  |                 | 0500B      | 1 2 1       |                                       | •          |                            | 8.3  |

| ION ALTITUDE 4051.37 FEET HELINEL NOT NEST HELINEL NOT NEST HES MOT NEST HELINEL NOT NEST H | +5L                 | SIGHIFICAN<br>2010<br>LC-37 | SIGNIFICANT LEVEL DATA 2010 Limitoz LC-37 | A.A      | GEODETIC COORDINATES<br>32.40175 LAT DEG<br>106.31232 LON DEG |
|--|---------------------|-----------------------------|---|----------|---|
|  |                     | TABLE 15                    |   |          |   |
| PirESSUILE   | PICESSUIL GEOMETRIC | Ę                           | ATu .E                                    | REL.HUM. |   |
|  |                     | AIR                         | DEWPOINT                                  | PERCENT  |   |
| MILLIBARS  | S MSL FEET          | DEGREES C                   | CENT 16KADE                               |          |   |
| 5.80.5   | 4051.4              | 29.4                        | 11.0                                      | 32.0     |   |
| 650.0  | 5067.3              | 25.9                        | 1n.9                                      | 39.0     |   |
| 917.4  | 6196.8              | 54.9                        | 4.2                                       | 37.0     |   |
| 159.8  | 8288.9              | 50.9                        | <b>3.</b> °                               | 9.65     |   |
| 100.00   | 10595.4             | 14.9                        | 5.7                                       | 47.0     |   |
| 4.606  | 14518.2             | <b>छ</b> •                  | -3.0                                      | 58.0     |   |
| 572.0  | 16074.0             | <b>3</b>                    | 6.2-                                      | 76.0     |   |
| 0.47.0   | 17249.9             | -2.1                        | -4.2                                      | 58.0     |   |
| 530.6  | 18043.5             | -3.9                        | <b>6.6−</b>                               | 63.0     |   |
| 522•6  | 18437.6             | -5.0                        | 1.00                                      | 77.0     |   |
| 506.4  | 19251.4             | -5.7                        | -14.7                                     | 0.64     |   |
| 90000  | 19578.9             | -6.7                        | -14.0                                     | 56.0     |   |
| 8.064  | 20055.3             | -7.9                        | -14.5                                     | 59.0     |   |
| 483.0  | 20465.1             | -7.9                        | 1.01-                                     | 39.0     |   |
| 9.654  | 21727.3             | -11.2                       | -25.3                                     | 30.0     |   |
| 436.8  | 23012.0             | -11.4                       | -22.0                                     | 41.0     |   |
| 0.004  | 25210.5             | -16.9                       | -24.7                                     | 46.0     |   |
| 379.2  | 26523.5             | -19.6                       | -24.5                                     | 65.0     |   |
| 358.4  | 27895.8             | -22.4                       | -24.4                                     | 58.0     |   |
| 337.0  | 29374.6             | -52.9                       | 9*62-                                     | 71.0     |   |
| 300.0  | 32117.3             | -31.5                       | 47.3                                      | 56.0     |   |

| 4051.37 FEET<br>0 Q3n HRS M        | #:SIL                 | IPPER AIR DAT<br>20101H0102<br>LC-37 | 41A            |                          | oFUDETIC<br>32+HL | C COORDINATES<br>40175 LAT DEG |
|------------------------------------|-----------------------|--------------------------------------|----------------|--------------------------|-------------------|--------------------------------|
|                                    | TABL                  | TABLE 16                             |                |                          | 106.              | 106.31232 LON DEG              |
| <b>LEMPERATURE</b>                 |                       | DELISITY SI                          | SPEED OF       | INU DAT                  | 4                 | INNEX                          |
| AIR DLWPOINT<br>DEGREES CEUTIGRADE |                       | ن                                    | SUUND<br>KNOTS | DIRECTION<br>DEGREES(IN) | SPEEU<br>KNOTS    | OF<br>REFHACTION               |
| 29.4 11.0                          | 32.0                  | 1007.H                               | 9.679          | ɔ.                       | 0.                | 1.000279                       |
| 27.9 11.0                          | 35.1                  | 997.3                                | 677.A          | 1.6.1                    | ٤.                | 1.000277                       |
| 10.                                | 38.5                  | 985.9                                | 675.9          | 179.0                    | .7                | 1.000275                       |
| 10                                 | 38.2                  | 971.2                                | 675.2          | 1<9.0                    | •                 | 1.000270                       |
| 0                                  | 37.3                  | 950.1                                | 9.4.6          | 129.0                    | 1.5               | 1.000264                       |
| 24.5                               | 3/•3                  | 942.1                                | 673.7          | 150•8                    | 0.0               | 1.000259                       |
|                                    | 38.2                  | 915.9                                | 47.194         | 5.47                     | 9.0               | 1.000249                       |
| ν.                                 | 38.7                  | 903.1                                | 670.3          | 114.1                    | 2.6               | 1.000245                       |
| 6.2                                | 39.7                  | 890.8                                | 669.0          | 36.5                     | •                 | 1.000240                       |
| 5.7                                | 41.5                  | 874.1                                | 667.5          | 70.0                     | •                 | 1.000237                       |
| 5•1                                | 43.2                  | 867.6                                | 0.499          | 6.3.3                    | •                 | 1.000233                       |
| 4.5                                | 6.44                  | 856.2                                | <b>504 • 4</b> | 9•69                     | •                 | 1.000229                       |
| φ.<br>•                            | 46.7                  | 845.0                                | 645.9          | 24.0                     | 0°0               | 1.000225                       |
| 3.6                                | 48.1                  | 853.R                                | 661.3          | 1.8.                     | 2 .               | 1.000221                       |
| 2.2 0.21                           | יים אינו<br>סיים אינו | 822.6                                | 659.8          | 1.00                     | 3 t               | 1.000217                       |
| 9. 6.6                             | 52.3                  | 800.7                                | 6500           | 5.45<br>5.45             | 6.7               | 1.000209                       |
| ٠.3                                | 53.7                  | 790.0                                | 655.0          | 59.1                     | 9.1               | 1.000205                       |
| -1.2                               | 55.1                  | 774.5                                | 053.4          | す・む す                    | 11.7              | 1.000201                       |
| -2.1                               | 56.5                  | 764.1                                | 651.A          | 46.1                     | 13.7              | 1.000197                       |
| <br>                               | 57.9                  | 74.9                                 | 650.2          | 200                      | 74.7              | 1.000193                       |
| 2.2 -2.8                           | h•69                  | 737.2                                | 047.5          | 54.7                     | 'n                | 1.000169                       |
|                                    | 75.1                  | 72b.h                                | 1.040          | 0.6c                     | ഗ                 | 1.000167                       |
| -5•1                               | 69.5                  | 716.4                                | 6.44.5         | 2.44                     | S                 | 1.000181                       |
|                                    | 51.8                  | 70h.5                                | 045.0          | 7.60                     | 74.4              | 1.000175                       |
| 3 6                                | 7.63                  | 20.00                                | 7.170          | 0.01                     |                   | 1.1000.1                       |
| 0 et •                             | 0                     | 675.0                                | 48.4           | 4                        | <b>J</b> -        | 1.00016.7                      |
| 110                                | 7.6                   | 964.4                                | 637.0          | 7.00                     | • •               | 1.000160                       |
| -14.1                              | F. T                  | 654.1                                | 0.30.7         | 1.10.7                   | סכ                | 1.000157                       |
| -14.4                              | 8.7                   | 644.7                                | 135.1          | 100.0                    | 7. 2.             | 451000.1                       |
| -19.5                              | 38.8                  | 63.5.1                               | 534.7          | 7.67                     | 3.0               | 1.000148                       |
| -21.8                              | 35.2                  | 623.9                                | 63341          | 7-80                     | 8.2               | 1.000145                       |
| -24.5                              | 31.6                  | 614.9                                | 631.5          | 5.0%                     |                   | 1.000142                       |
| -54.                               | 32.3                  | 604.3                                | 6.30 . 7       | 1.10                     | 7.3               | 1.000139                       |
| -23.                               | 36.6                  | 592.6                                | 630·6          | 45.4                     | •                 | 1.000137                       |
| 1.4 -22                            | ċ                     | -                                    | b30•t          | •                        | •                 | 1.00135                        |
| -12.6 -22.8                        |                       | 57, 2                                | 1.00.1         | 3.0                      | 0                 | 1.000133                       |

| GEODETIC COOMDINATES  106-51232 LON DEG  106-51232 LON DEG  A INJEX  SPEEU  6-7 I-000131  10.0 I-000124  7-7 I-000124  7-7 I-000124  7-7 I-000124  7-7 I-000124  7-7 I-000114  7-7 I-000114  7-7 I-000116  5-0 I-000116  5-5 I-000116  3-5 I-000116  3-5 I-000116  3-5 I-000116 | 1.000102<br>1.000100<br>1.000098 |
|---|----------------------------------|
| 9 <del>7 9</del>  |                                  |
| 1 100 100 100 100 100 100 100 100 100 1   |                                  |
| 6<br>DIRECTION<br>DEGREES(1N) K<br>DEGREES(1N) K<br>10.9<br>2.6<br>3.55.0<br>3.40.9<br>3.40.9<br>3.40.9<br>3.40.9<br>3.40.0<br>3.40.0<br>3.40.0<br>3.40.0<br>3.40.0<br>3.40.0<br>3.40.0<br>3.40.0<br>3.40.0<br>3.40.0   |                                  |
| 52 SPEEU OF SOUND KNOIS 627.6 627.6 627.6 627.6 620.7 620.7 619.4 618.1 615.3 615.3 619.4 611.2   | 608.6                            |
| PFR AIK   20101AH11 LC-37 LC-37 ABLE 16 C( DENSITY GM/CUBI. METER 555.7 555.7 555.7 554.7 554.7 6495.9  | 449.0<br>441.5<br>434.1          |
| REL.HIJM.<br>PERCENIT.<br>43.2<br>44.4<br>45.5<br>50.2<br>50.0<br>63.3<br>63.3<br>67.7<br>70.3<br>64.8  | 62•1<br>59•4<br>56•6             |
| FEET MSL HRS M DT TEMPERATURE  R  | -34.1<br>-35.6<br>-37.0          |
| 1.37 FEE<br>930 HRS<br>018 OLEGREES<br>-13.9<br>-15.4<br>-15.4<br>-15.6<br>-20.6<br>-21.6<br>-21.6<br>-21.6<br>-25.0<br>-25.0   | -30.2                            |
| ITUDE 405 10. 162 010. 162 MILLIMARS 419.9 411.5 403.4 397.4 377.6 374.6 374.6 374.6 374.6 374.6 374.6  | 306.0                            |
|   | 51100.0                          |

| 650beTic COOMDINATES<br>52-40175 LAT 0EG<br>106-31232 LON 0EG        | WIND DAIA               | DIRICTION SPEED<br>JEGRLES(TN) KNOTS | 129.0 | 131.8 2.3 |        |        |          | 49.3 15.4 |        |             |        |        | 343.0  |        |
|--|-------------------------|--------------------------------------|-------|-----------|--------|--------|----------|-----------|--------|-------------|--------|--------|--------|--------|
| VELS<br>o2   | KEE.HIM.                | PERCENT                              |       | 38.       |        |        |          |           |        |             |        |        | 63.    |        |
| F.A.UDATORY LEVELS<br>2010146162<br>LC-37                            | TABLE 17<br>TFMPERATURE | AIR DEMPOINT<br>DEGREFS CENTIGRADE   | 10.9  | 8•4       | 6•1    | 3.7    | <b>†</b> | -2.4      | -8.4   | -14.0       | -23.4  | -25.7  | -28·B  | -37.3  |
| 2  | T.<br>TFMp§             | AIR<br>DEGREFS (                     | 25.9  | 23.7      | 19.9   | 14.9   | 9.5      | 3.8       | -1.7   | <b>-6.7</b> | -11.3  | -16.9  | -23.7  | -31.5  |
| T dsL<br>MDT   | EGPOTENTIAL             | FEET                                 | 5064. | 6810.     | 8550.  | 10505. | 12625.   | 14785.    | 17084. | 19551.      | 22226. | 25168. | 28415. | 32052. |
| STATION ALIITUUL 4051.37 FEET 4SL<br>20 July 61<br>Asclasion no. 162 | PRESSUNE GEOPOTENTIAL   | MILLIPAKS                            | A50.0 | 0.008     | 15/:•0 | 0.007  | 6.50.0   | 600.09    | 550.0  | 500.0       | 450.0  | Û•00ħ  | 350.0  | 300.0  |

| 6£00e11C COMBINATES<br>32.40043 LAT DEG<br>106.37033 LOM DEG                      |          |                     |          |                    |        |        |        |             |         |         |         |         |         |         |         |                 |         |         |         |         |
|---|----------|---------------------|----------|--------------------|--------|--------|--------|-------------|---------|---------|---------|---------|---------|---------|---------|-----------------|---------|---------|---------|---------|
| <b>₩</b>  |          | KF L. HUM.          | PLHCENT  |                    | 31.0   | 41.0   | 41.0   | 38.0        | 0.00    | 0.40    | 72.0    | 62.0    | 79.0    | 26.0    | 54.0    | 3.45            | 31.0    | 54.0    | 31.0    | 45.0    |
| SIGNIFICANT LEVEL DATA<br>20100-0465<br>WHITE SANDS                               |          | <b>TEMP</b> ERATURE | DEWPU111 | DEGKEES CENTIGRAUP | 11.7   | 13.2   | 11.7   | <b>†*</b> 6 | 3.3     | ٠.      | 5.7-    | 10.1    | -7.1    | -11.5   | -13.7   | -20.0           | -25.5   | -21.1   | -27.6   | -25.0   |
| SIGGIFIC  | TABLE 18 | TEMPE               | AIR      | DEGKEES            | 30.8   | 27.6   | 26.0   | 24.7        | 14.9    | 9.1     | 2•0     | -2.9    | 0.4     | 0.4.    | 6.5     | -6.8            | 9.6-    | -13.8   | -14.2   | -16.5   |
| 45L<br>T  |          | PICESSURE SEUMETRIC | ALTITUDE | MILLIBARS MSL FEET | 3989.0 | 5087.2 | 5567.0 | 7001.0      | 10528.3 | 13046.5 | 15766.2 | 17737.3 | 18260.6 | 18543.0 | 19527.6 | 20603.2         | 21853.9 | 24011.9 | 24443.3 | 25274.5 |
| STATION ALTITUDE 3989.00 FEET MSL<br>20 JULY 61 1030 MRS MDT<br>ASCENSION NO. 465 |          | P.ÆSSUR             |          | MILLIBAR           | .82•5  | 0°020  | d33.2  | 195.6       | 700+0   | 041.2   | 9*625   | 537.8   | 527.1   | 521.4   | 500.0   | <b>181• 181</b> | n•85h   | #5u-8   | . 413.6 | 0.004   |

| ,   |            | '                                      |              |   | UPPER AIR DAI             | AIA            |              |                 |   |
|---|------------|--|--------------|---|---------------------------|----------------|--------------|-----------------|---|
| STALLOW ALTITUD<br>29 JULY 61<br>650-15108 60 | 700E       | 3989.00 FEET USU<br>108n ARS MDT<br>18 | MDT          |   | 2010020465<br>WHITE SANUS | <b>યે</b> રે   |              | GEODE T1<br>32. | GEODETIC COORDINATES 32.40043 LAT DEG 106.47043 LOJ GEO |
|   |            |  |              | •   | TABLE 19                  |                |              |                 | 200 100 100 100 100 100 100 100 100 100                 |
| GEOM, TRIL                                    | PRESSURE   | E                                      | I EMPERATURÉ | REL . HUM.  | DENSITY                   | SPEEN OF       | . INU DATA   | TA              | INIT  |
| ALTITUDE                                      | (          | AIR                                    | DEWPOINT     | PERCENT   | ر                         | Sound          | DINE . TION  | SPEED           | 40  |
| 4SL FEET                                      | riILLIBARS | DEGREES                                | CENTIGRADE   |   | METER                     | NOTS           | DEGREF S(TW) | KNOTS           | KEFRACT10N  |
| 3989.0  | 842.9      | 30.8                                   | 11.7         | 31.0  | 1005.5                    | 681.2          | 3+10+0       | 0.9             | 1.000241  |
| <b>0.000</b> ⊁                                | 984.2      | 30.8                                   | 11.7         | 31,1  | 1005.2                    | 681.2          | 350 • 1      | 0.9             | 1.000281  |
| 4500.0  | 861.2      | 29.3                                   | 12.5         | 35,7  | 992.5                     | 679.7          | 358.0        | 4.8             | 1.000282  |
| 5000·0  | 852.5      | 27.9                                   | 13•1         | 40.5  | 980.1                     | 678.2          | 10.4         | 3.8             | 1.000282  |
| 5500.0  | 830.0      | 26.5                                   | 12.1         | 41.0  | 964.1                     | 6,979          | <b>5.6</b> 0 | 3.1             | 1.000276  |
| 0.0000  | 823.6      | 25.7                                   | 11.2         | 40.3  | 954.3                     | 675.5          | 44.6         | 2.6             | 1.000269  |
| 0.500.0                                       | 80%        | 25.2                                   | 10.3         | 39.1  | 939.7                     | 674.9          | 12.4         | 2.2             | 1.000263  |
| 20000   | 795.6      | 24.7                                   | <b>#•</b> 6  | 38.0  | 925.3                     | 2.429          | 110.0        | 2.4             | 1.000257  |
| 7500.0  | 781.7      | 23.4                                   | 8•9          | 39.7  | 913.4                     | 5.570          | 47.3         | 2.4             | 1.000253  |
| 3.00ng  | 760.0      | 22.0                                   | •            | 41.3  | 901.6                     | 671.1          | 40.t         | 2.5             | 1.000249  |
| 9-0005  | 754.6      | 20.7                                   | <b>1.6</b>   | 43.0  | 89n.1                     | 4.690          | 63.5         | 5.6             | 1.000244  |
| 0.0006  | 741.4      | 19.3                                   | •            | 9•44  | 878.7                     | 667.9          | 57.4         | 2.8             | 1.000240  |
| 9500.0  | 720.4      | 17.9                                   | 6.3          | 46.3  | 867.4                     | 6666.3         | 55•4         | 3.0             | 1.000236  |
| 10000   | /10./      | 16.6                                   |              | 47.9  | 855.4                     | 664.7          | 50.6         |                 | 1.000232  |
| 10500.0                                       | 703.5      | 15.2                                   | æ (<br>⇒ (   | 9.64  | 845.5                     | 063-1          | 52.7         | 3.2             | 1.000228  |
| 0.00.011                                      | 0.060      | 14.0                                   | D •          | 50.6  | 834.1                     | 661.6          | 41.7         | 0.<br>0.        | 1.000223  |
| 12000-0                                       | 66th       | 9-11                                   | 100          | 10 to | 911 5                     | 7.000<br>7.000 | 7.0:         |                 | 1.0001  |
| 12503.0                                       | 654.0      | 10.4                                   | 1 6          | 53.1  | 800.4                     | 657.3          | 1.65         | 9               | 1.000210  |
| 15000.0                                       | 642.3      | 9.5                                    | 3            | 53.9  | 784.5                     | 655°B          | £ 500        | 11.2            | 1.000206  |
| 13500.6                                       | 630.9      | 7.9                                    |              | 57.0  | 77H.h                     | 654 • 3        | 2000         | 12.4            | 1.000203  |
| 14000.0                                       | 610.9      | 9•9                                    | <b></b> 5    | 60.3  | 767.9                     |                | 6.75         | 13.0            | 1.000200  |
| 14500.0                                       | 607.5      | 5•3                                    | -1.0         | 63.6  | 757.3                     | _              | 6•69         | 13.6            | 1.000196  |
| _   | 0.000<br>  | 0.0                                    | -1.6         | 66.9  | 747.0                     |                | 7.4.7        | 14.3            | 1.000193  |
| 15500.0                                       | 080°       | 2.7                                    | -2.5         | 70.2  | 73h. H                    |                | D. 70        | 14.8            | 1.000190  |
| 0.00.001                                      | 0.470      | <b>5</b> • F                           |              | 8°07  | 72h.h                     |                | 70.5         | 15.3            | 1.00186   |
| 10500.0                                       | 2000       | N .                                    |              | 68.5  | 716.4                     | 042.0          | 6•1°         | 14.5            | 1.000161  |
| J•00077                                       | 1555       | -1-1                                   | 9.9-         | /•69  | 702.                      | 543.4          | T•0€         | 13.3            | 1.000176  |
| 0.005/1                                       | 7.240      |  | -8.5         | 63.2  | 64P.                      | 7. Tho         | 7.0f         | 11.5            | 1.000172  |
| 13000.9                                       | 525.4      |  | 0.8-         | 70.5  | 68h.1                     | 940.5          | ジ・ナケ         | 9.3             | 1.000170  |
| 16590.0                                       | 522.5      | C • † •                                | 0            | 59.5  | 674.7                     | n39.4          | 192.0        | 7.2             | 1.000164  |
| 19009-0                                       | 212.5      | 8.5                                    | -12.4        | 55.2  | 663.9                     | 634.7          | 9 · 50       | 0.9             | 1.000160  |
| 19500.0                                       | 205.5      | -5.7                                   | -13.4        | 24.5  | •                         | 637.7          | A1.3         | 5.3             | 1.000157  |
| 700000  | 8.264      | -6.2                                   | -15.8        | 46.4  | 642.3                     | 6,060          | 0.69         | 6.1             | 1.000153  |
| 20500.0                                       | 48.03      | -6.7                                   | -19.5        | 36.1  | 631.3                     | 636+2          | 01.0         | 6.9             | 1.000148  |
| 21000·D                                       | 0.474      | -7.7                                   | -21.1        | 33.0  | 621.4                     | 635+0          | ye.9         | 7.1             | 1.000145  |
| 21500.0                                       | 8.404      | -8.8                                   | -22.5        | 31.8  | 612.0                     | 633.7          | 5.2.1        | 7.8             | 1.000142  |
| 22000-2                                       | 8.00±      | 6.6-                                   | -23.2        | 32.6  | 602.0                     | 632.4          | 49.1         | 0.6             | 1.000139  |
| 42500.n                                       | <b>;</b>   | -10.9                                  | -22.4        | 37.9  | 592.4                     | 631.2          | 40. I        | 10.1            | 1.000138  |
| 23000.0                                       | 436.0      | -11.8                                  | -21.3        | 43.2  | 58.5.4                    | 1.0cg          | J•D+         | 11.3            | 1.000136  |

| STATION ALITHUE 3989.00 FEET R.S.<br>20 JULY 51 | .11TUDE 39  | 89.00 FE       | E1 6.5L<br>R BT                           |            | OFFR AIN DAIN<br>2010020405<br>WHITE SANDS | ปล โภ<br>:uts<br>ปร |                                      | 11 ODE 11      | 0.E ODE TIC COOKOTIVATES 52-40043 EAT 116 |
|---|-------------|----------------|---|------------|--|---------------------|--------------------------------------|----------------|---|
| ASCERSTON                                       | 1:0. 465    |                |   | •          | TABLE 19 CON'T                             | T'NO                |                                      | 106.           | 106-37033 Lud DEG                         |
| GFOWF TRIC PRESSURE                             | PRESSURE    | FER            | <b>TEMPERATURE</b>                        | REL.HIM.   | DENSITY                                    | SPECIO OF           | AINU UNI.                            | 4 L            | Itan X                                    |
| ALTITUDE  | HILLIUARS   | AIK<br>DEGREES | AIR DEWPOINT NILLIUARS DECRIES CENTIGRADE | PERCENT    | PERCENT GM/CUBIC SOUND METER KNOTS         | SCOLED              | DIRECTION SPEED<br>DEGREES(IN) KNOTS | SPEEU<br>KNOTS | OF<br>REFRACTION                          |
| 23580.0   | <b>423.</b> | -12.8          | -21.4                                     | 48.5       | 574.1                                      | 574.1 623.4         | 45.1                                 | 11.8           | 1 • 00001 34                              |
| 0.00042   | 4~1.0       | -13.8          | -21.1                                     | 53.9       | 564.9                                      | 627.1               |                                      |                | 1.000132                                  |
| 24500-9   | \$          |                | -27.4                                     | 32.0       | 555.2                                      | 6,079               |                                      |                | 1.000127                                  |
| 25000.0   | 7           |                | -26.1                                     | <b>†•0</b> | 547.11                                     | 5.020               |                                      |                | 1.000126                                  |

| 0E0DETIC COORDINATES<br>32-401143 LAT 0E6<br>106-57033 LOTI 10FG                  |   | DIN CIION SPEED<br>DEGREES(TN) KNOIS | 13.1 5.6 | 99.7          |       |         |                     |         | 87.7 12.7   |        |        |        |
|---|---|--------------------------------------|----------|---------------|-------|---------|---------------------|---------|-------------|--------|--------|--------|
| ivel.S<br>Ss<br>Ss  | KEL • MU.1 •<br>PERCENT                           |                                      | 41.      | 38.           | • † † | 50.     | 53•                 | 30.     | <b>b</b> 5• | 54.    | 36.    | 45.    |
| I ANDATORY LEVELS 20,100,20405 WHITE SAMUS TABLE 20                               | TFMFERATURE<br>AIR DEVPOINT<br>DEGKLES CENTIGRALE |                                      | 13.2     | 4.6           | 7•4   | ‡<br>•  | <br>                | -1.4    | -7.1        | -13.7  | -22.1  | -25•h  |
| - 1   | L TFM;  | DEGILLES                             | 27.6     | 54.9          | 20.5  | 14.9    | 10.0                | t) • t) | -1.4        | -5.9   | -10.5  | -16.5  |
| 1 ,4SL  | PRESQUIE GEUPOTENTIAL                             | FELT                                 | 5033.    | <b>6636</b> . | 8681. | 10t.18. | 12 <sub>660</sub> . | 14025.  | 17128.      | 19599. | 22288. | 25231. |
| STALLOW ALLITUDL 3989.00 FLET MSL<br>20 JULY W1 1030 RS MD.<br>ASCELISIOL NO. 465 | 9 JYNCZCOYE 0!                                    | MILLIDANS                            | 9.02A    | U•908         | 0.067 | 0.007   | U-064               | €.00-3  | 550.0       | 0.50%  | u50.0  | 0.001  |

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